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UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
WASHINGTON, D. C.

*July 1941*

HYDROLOGIC STUDIES

COMPILATION OF  
RAINFALL AND RUN-OFF DATA FROM THE WATERSHEDS  
OF THE  
ARK.-LA.-EAST TEXAS SANDY LANDS  
CONSERVATION EXPERIMENT STATION  
TYLER, TEXAS

1931-39

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PRODUCTION SECTION  
CURRENT SERIAL RECORDS

Prepared in cooperation  
with  
The Texas Agricultural Experiment Station

Office of Research  
SCS-TP-41  
June, 1941





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TYLER, TEXAS

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By

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*Ascertained*

Prepared in cooperation  
with  
The Texas Agricultural Experiment Station  
under the direction of  
C. E. Ramser  
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Office of Research  
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## CONTENTS

	Page
The station.....	1
Acknowledgements.....	1
Physical characteristics.....	2
Watersheds - their history and description.....	2
Wooded watershed No. 3.....	2
Cultivated watershed No. 4.....	3
Strip-cropped watershed No. 5.....	4
Instrumentation.....	5
Rain gages.....	5
Parshall flumes.....	7
Ramser silt samplers.....	7
Compilation of data, methods.....	8
Description of wooded watershed No. 3 (Appendix A).....	10
Maps.....	
Compilation of data, records.....	



## TABLES

<u>No.</u>		<u>Page</u>
1.	Recording rain gages.....	6
2.	Wooded watershed, stand table.....	14
3.	Wooded watershed, growth rate.....	15
4.	Wooded watershed; surface condition.....	21
5.	Wooded watershed, forest inventory.....	21
6.	Wooded watershed, rainfall, run-off and soil loss summary.....	21

## PLATES

I	Run-off measuring equipment, wooded watershed No. 3.....
II	Run-off measuring equipment, cultivated water- shed No. 4.....
III	Run-off measuring equipment, cultivated water- shed No. 4.....
IV	Cultivated watershed No. 4.....
V	Run-off measuring equipment, strip-cropped watershed No. 5.....
VI	Strip-cropped watershed No. 5.....
VII	Wooded watershed, area retired from cultivation
VIII	Wooded watershed, red cedar trees in cemetery..
IX	Wooded watershed, brush growth.....
X	Wooded watershed, scattered large trees.....

## FIGURES

1.	Map of the Conservation Experiment Station.....
2.	Soil map of the Conservation Experiment Station
3.	Map of wooded watershed No. 3.....
4.	Map of cultivated watershed No. 4.....
5.	Map of strip cropped watershed No. 5.....



REPORT ON HYDROLOGIC INVESTIGATIONS ON SMALL WATERSHEDS  
AT THE SOIL CONSERVATION EXPERIMENT STATION,  
SOIL CONSERVATION SERVICE, TYLER, TEXAS

I. The Experiment Station

The Soil and Water Conservation Experiment Station, located about 10 miles northwest of Tyler, was established in 1930. Work on the station was cooperative between the Bureau of Chemistry and Soils and the Bureau of Agricultural Engineering of the U. S. Department of Agriculture and the Texas Agricultural Experiment Station, College Station, Texas. In April 1935 the activities of the Department of Agriculture on this station were assigned to the Soil Conservation Service. It is generally regarded that this station serves an area of approximately 33 million acres in southwestern Arkansas, northwestern Louisiana, and in eastern Texas.

Acknowledgment is made to C. E. Ramser for locating the watersheds and for early direction of the work. The installation of the equipment and the collection of the early basic records were done by R. W. Baird. During 1936 and the early part of 1937, collection of the records was in charge of S. J. Mech. He was assisted by J. C. Archer who has had intimate knowledge of the work and the areas from the beginning of the records. Since April 1937 the author has been in charge of the operation of the watersheds.





The instructions for compiling, tabulating, and presenting the data were prepared by W. D. Potter and L. L. Harrold of the Washington office, Hydrologic Division, Soil Conservation Service, and the data were reviewed by them before publication. The compilation work in the field was initiated by W. D. Potter.

## II. Physical Characteristics of the Station

The Arkansas-Louisiana-East Texas Sandy Lands Soil and Water Conservation Experiment Station utilizes a part of the 455-acre tract of the Texas Agricultural Experiment Substation No. 2.

The topography is gently rolling to hilly. The principal soils are fine sandy loams with the Kirvin, Macgdoches, and Bowie series predominating but with Hannabatchie, Susquehanna, Norfolk, Bibb, and Orangeburg represented.

## III. Description and History of each Watershed

This report is chiefly concerned with three watersheds, Nos. 3, 4, and 5.

Wooded watershed No. 3 has an area of 7.94 acres and an average slope of approximately 7.5 percent. The size and shape have not been altered since the boundaries were established in 1932, the only changes occurring being the natural increase in the size of the trees and the increase in the density of the understory. A small amount of grazing was permitted in the past but has now been discontinued. A very small portion of the area on which a cemetery had been located was burned in 1938.



Figure 3 is a contour map showing the size, shape, and the topography of the watershed.

A detailed description of the vegetative cover, together with a stand count and forest inventory for this watershed, is given in Appendix A of this report.

Unterraced cultivated watershed No. 4 is a badly gullied area with an average slope of 7.5 percent. This land has been under measurement since July 1930 and has been treated always with the same cropping plan used for a large part of the terraced fields on the station. Until 1939 the boundaries of this fan-shaped watershed, for the most part, were the natural divides along the sides, with a terraced area above limiting the extent of its slope and area. Gully formations near the upper ends of the watershed tended to divert from the watershed a small part of the drainage from time to time. When these gullies had developed in depth to such an extent that their inclusion in the area became difficult, the water was allowed to drain outside the watershed boundaries and the area served by the gaging station was reduced accordingly. This accounts for the changes in the drainage areas shown up to 1939. In March 1939 levees were constructed along each side to fix the permanent boundaries and to enclose its present area of 6.05 acres.



When first placed under measurement the two larger gullies near the middle of the watershed were somewhat protected by a growth of brush. This protection was augmented to a limited extent by temporary brush dams constructed during the summer of 1930, and later by a small amount of sodding. All cultural practices have been conducted on the approximate contour, but during 1931, 1932, 1933, and 1934 farming across these gullies was not practiced except at strategic points. During the fall of 1935 the brush was cleared from the gully banks and since most of the temporary dams had been obliterated, the gully banks were plowed in to permit all farm implements to cross at almost every row.

In 1936 the flume and silt box were replaced and elevated slightly from their original elevations. During this period of rebuilding the records for the first six months of the year were lost. Later a slight amount of silting occurred in the lower gullies.

Figure 4 is a contour map of this cultivated watershed.

Unterraced cultivated watershed No. 5 has been strip-cropped during most of the time that it has been under measurement. This watershed is one on which the control and erodible strips have each occupied 50 percent of the area for most of the periods.



As in the case of Watershed No. 4, boundaries followed natural divides and were not continuous levees during early periods of the operation of this gaging station. Gullies and cultural practices sometimes permitted a certain amount of diversion from the watershed, at which times the boundaries and the area were altered accordingly. In March 1939 continuous levees were constructed to fix the boundaries of the watershed.

Figure 5 shows a contour map of the strip-cropped watershed.

#### IV. Instrumentation

##### A. Rain gages - Standard and Recording

1. All recording rain gages at this station are Fergusson type weighing and recording rain and snow gages. In addition to the recording gages shown in Table No. 1, several standard 8-inch Weather Bureau gages are located on the station. Dual installations of standard and recording gages are not utilized at all locations, but stick readings of the rainfall collected by the recording gages are always made and this reading used for the amount of rainfall. The recorded data are utilized for rainfall intensities and durations.

Since January 1937 recording gages have been so located that they can best serve the watersheds directly without weighting.





Table 1 - Recording rain gages, their location, date of installation, scales and proximity of obstacles.

Gage No.	Location	Date of Installation	Scales: 1" on		Distance from Nearest Obstacles
			Chart	Equals	
			Time	Rainfall	
			Minutes	Inches	
1	Project No. 1 plots	Oct. 18, 1930 <sup>2</sup> / <sub>1</sub>	31.5	0.66	No obstacles within 300'
3	Project No. 3 plots	Jan. 1, 1938 <sup>2</sup> / <sub>1</sub>	126.0	.66	Scattered trees 30' high, 60' away
7	Project No. 4 plots	Nov. 10, 1931	63.0	.66	Scattered trees 50' high, 100' away
10	Field "C" adjacent Field "D"	Oct. 28, 1931 <sup>4</sup> / <sub>1</sub>	63.0	.66	No obstacles within 600'
12	Field "A", Terrace A-7	Dec. 30, 1936	63.0	.66	No obstacles within 450'
16	Field "B"	Dec. 30, 1936	63.0	.66	No obstacles within 350'
19	Terrace C-19	Jan. 1, 1938 <sup>5</sup> / <sub>1</sub>	63.0	.66	No obstacles within 450'
21	Weather yard	Apr. 14, 1939	126.0	.66	Greenhouse 8' high, 70' to S.E.

1 All recording rain gages are of the Fergusson weighing type.

2 Present 6-hour gage installed Oct. 26, 1938, replacing older installation.

3 Moved from location in Field "N". Initially installed Aug. 1, 1932.

4 Moved from location at Federal farmstead. Initially installed Apr. 16, 1930.

5 Moved from cemetery location (No. 20). Initially installed Dec. 30, 1936.



B. Parshall Flumes

1. Parshall improved type Venturi flumes are used for all volume and rate measurements of run-off, the stage and time recorded for the most part by float type Bristol water-stage recorders. However, run-off stations 4 and 5 during the early periods of operation were equipped with Bristol recording pressure gages.

C. Ramser Silt Sampler

1. Measurements of soil losses in run-off water were made by means of Ramser silt samplers in conjunction with silt boxes of varying size, depending on the size of the watershed.

The run-off water first passes through the Parshall flume where stage and time are recorded by the instrument on a 12-hour chart. The water then discharges into the silt box where the heavier particles settle out before the water passes over the rectangular weir at the end of the box. As the water flows over the weir an aliquot sample is continuously collected by the Ramser silt sampler.

The oven-dry soil content of samples from the tank and silt box is determined in the laboratory. The percentage of dry soil content of the samples from the silt box is determined by the ratio of the



gives the quantity of dry soil retained by the silt box. The ratio of quantity of soil to water in the Ramser silt sampler multiplied by the amount of water passing over the weir gives the total amount of soil carried away in suspension. The sum of these two quantities gives the amount of soil loss in run-off water from the area.

#### V. Graph and Tabulation Sheets

A tabulation of rainfall and run-off has been prepared on Form SCS-345 for all storms during the period of record. This tabulation includes watershed sizes, rain gages used in the computations, and condition of the watersheds.

The storms selected for graphic presentation were those where run-off occurred on at least one of the watersheds and represent practically all types of rainfall during the periods covered.

Whenever the record from the rain gage in field "C" was satisfactory it was used on the graphs. This gage is one of the oldest gages on the station and is located adjacent to Watershed No. 4 which lies somewhat between Watersheds 3 and 5. As a consequence, the record from this gage is the most nearly representative of the precipitation on the three watersheds. When the field "C" record was unsatisfactory because of mechanical failure, the gage on Project No. 4 plots was used, since it is also one of the older locations on the station and somewhat centrally located. The records from the latter gage, however, may be affected occasionally by large trees close by.



The accumulated rainfall graphs reproduce the record from the rain gage charts although on a somewhat different scale. In plotting and in computing the rates of rainfall the "break points", or the points on the chart where the rate of rainfall actually changed, were utilized rather than an arbitrarily selected time interval.

In preparing the hydrographs of surface run-off, the "break points" as well as various intermediate points on the stage recorder charts were used. These were converted to cubic feet per second by means of rating tables prepared for the individual Parshall flumes used.





## APPENDIX A

### Description of wooded watershed<sup>1</sup> Arkansas-Louisiana-East Texas Sandy Lands Conservation Experiment Station, Tyler, Texas April 1939

F. B. McKeithen<sup>2</sup>

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The wooded watershed, comprising 7.94 acres, forms a part of the Arkansas-Louisiana-East Texas Sandy Lands Conservation Experiment Station located about 10 miles northwest of Tyler, Smith County, Texas.

The wooded watershed, located in the experiment station as shown in figure 3, is situated about midway on a long slope that averages 7.5 percent. The upper portion of the slope is cultivated while the lower part is pastured. The wooded watershed extends from an elevation of approximately 118 to 146 feet and is well protected from outside influences.

The soil is classed as Kirvin fine sandy loam, with the average depth of the A horizon varying from 9 to 15 inches. The top soil contains a large amount of gravel and tends to cement together to form a pavement when the finer soil particles are lost by erosion.

For the purpose of this description, the watershed has been divided into five types based on the condition of cover and past use of the land as delineated on map, figure 3. A brief description of each type follows:

---

<sup>1</sup>The survey of the wooded watershed was carried out by the Forestry Division, Soil Conservation Service, in accordance with the specifications of W. U. Garstka, Hydrologic Division.

<sup>2</sup>Forestry Division, Soil Conservation Service.



Grassland - 1.04 acres

This area is located on the upper side of the watershed and was in cultivation for many years prior to 1932. At that time it was retired from cultivation and allowed to reseed naturally to grass. It contains an excellent cover of various species of grasses at the present time. This area serves to catch soil and water from a well-traveled dirt road lying above and adjacent to the watershed (pl. VII).

Cemetery - 0.76 acres

This area has been used as a cemetery since 1847. It contains a scattered stand of trees, chiefly *Juniperus virginiana*, which had been planted as markers or shades for graves. Many of the trees are over 75 years old. The area has been subjected to periodic "graveyard workings", a practice of hoeing and raking the grass, weeds, and brush from the area, leaving the soil entirely bare. This custom was discontinued, however, in 1936 and the ground at present is well covered with grass and other vegetation (pl. VIII).

Roadway - 0.25 acres

The road, approximately 12 feet wide and 660 feet long, was completely blocked from all traffic in April 1939. It has not been used for heavy traffic since 1935, but farm implements and machinery have been transported over it since then preventing the establishment of any vegetation. Sheet erosion is active since the roadway is not on the contour, and considerable deposition has collected at the foot of the slope.

Ungrazed Woodland - 1.16 acres

This area has never been subjected to grazing according to all available records. It contains a good stand of large timber with a dense



understory of reproduction, grass, and herbs. There are two small areas within this type which were desurfaced in 1919 but contain a fair cover of grass and weeds at the present time. This type was evidently used as a parking lot for wagons and teams when there were funerals in the cemetery. According to the old residents, a church was also located in the edge of this area but abandoned many years ago. Any effect of packing of the soil by people is not visible at the present time. (pl. IX.)

#### Grazed Woodland - 4.73 acres

This is the only portion of the watershed that has been subjected to grazing. It was grazed only in the period 1932-1936. The stand of timber is comparatively thin with reproduction of inferior species predominating. Wind sweep has left bare spots under many of the larger trees. Large openings varying up to one-tenth of an acre in size are found in this area (pl. X).

#### Inventory

A 100-percent inventory was taken of all trees six-tenths of an inch and over diameter breast height (DBH). Each type was inventoried separately. The field work for this survey was made during the period April 3-9, 1939. Certain details were eliminated as only a week was allotted for completion of the work. A summary stand table for the entire woodland (table 2) is included in this report.<sup>3</sup>

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<sup>3</sup>Detailed report and field notes are on file at the Conservation Experiment Station.



### Growth Rate

As this was the first survey of the forest ever made in this watershed, growth rate was determined to ascertain whether a marked change might have occurred since 1930 and to provide an additional means of comparison with other woodlands.

The determination of growth rate was made in accordance with the procedure outlined by George F. Rupp.<sup>4</sup> A slight variation was made in collecting data, as growth was measured on 100 percent of the trees in the cemetery and ungrazed woodland while only 50 percent was measured for growth in the grazed woodland area.

The growth rate expressed as growth percent is given by diameter classes for the entire watershed in table 3:

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<sup>4</sup>"A simple method of securing the technical data necessary for the preparation of woodland management plans", September 1938. (SCS-mimeo.)





FORESTED WATERSHED STAND TABLE, AREA 7.936 ACRES  
TREES BY SPECIES AND DIAMETER CLASSES

April 5, 1939

McKee, then, Chalk, and Johnson

TABLE 2  
ARIZONA-LOUISIANA EAST TEXAS SANDY LANDS  
CONSERVATION EXPERIMENT STATION  
TYLER, TEXAS

Tree No.	Black Oak	Post Oak	Black Oak	Hickory	Red Cedar	Black Cherry	Dogwood	Winged Elm	Sassafras	Prickly Ash	Mulberry	Persimmon	Crope Myrtle	Hackberry	Total Trees	Percent
1	3	1	2	3	1	1			4	22	1	9	1	1	48	10.0
2	3	5	2	1	1				8			3	1		5	1.0
3	13			3								2			7	2.1
4												5			37	7.7
5	15	9	5	5								1			42	8.7
6	14	10	3	1			1	1	6	2	2				36	7.5
7	17	13	3	1	2				1					1	27	5.5
8	11	5	4	4	1				1						26	5.4
9	9	7	2	4	5										20	5.8
10	10	4	2	1	2				2					1	21	4.4
11	12	2	2	4	4				3						27	5.5
12	15	1	1	9	2				1					1	30	6.2
13	12	3	3	5	2				2						27	5.5
14	10	1	2	5	1				1						27	5.5
15	7	1	2		2			1							13	2.7
16	19	3	2		2										27	5.5
17	11		4	1	1										17	3.5
18	9	1	4												13	2.7
19	9				2										9	1.9
20	7														9	1.9
21	2	1													0	0
22			1												2	.4
23			1												1	.2
24															1	.2
Total	205	63	45	46	23	1	1	2	32	24	3	20	2	4	491	
Percent	12.5	14.2	9.4	9.5	5.8	.2	.2	.4	6.7	5.0	.6	4.2	.4	.8		100.0



Table 3.- GROWTH RATE BY DIAMETER CLASSES<sup>1</sup>  
 April 1939 Tyler, Texas

DBH	Number of <sup>2</sup> Trees	Growth Percent	DBH	Number of <sup>2</sup> Trees	Growth Percent
<u>Inches</u>			<u>Inches</u>		
4	35	9.8	16	27	1.7
5	43	9.9	17	17	2.2
6	36	9.3	18	12	2.1
7	30	8.4	19	10	2.2
8	25	5.4	20	9	1.6
9	28	5.3	21	0	0
10	21	4.3	22	2	2.1
11	26	3.1	23	0	0
12	30	3.4	24	1	1.0
13	25	3.1	25	0	0
14	27	2.5	26	1	1.2
15	13	2.9	34	1	1.8

<sup>1</sup>According to Pressler's formula based on a 10-year period.

<sup>2</sup>Number of trees used in this calculation.

#### MANAGEMENT HISTORY

##### Cutting

The grazed and ungrazed woodland areas were subjected to a clearing or an improvement cutting in the spring of 1936. The undergrowth of briars, American Beauty berry, vines, *Crataegus* spp., and some of the reproduction of oak and hickory, were removed. Dead and badly defective trees were taken out and the remaining trees pruned of dead limbs. The purpose of the cutting was to



create a park-like appearance in the woods by eliminating the understory of brush and small saplings. Removal of the dead and defective trees was classed as a sanitary measure. No record was kept of the amount of material removed. The stand improvement work has probably had a deleterious effect in that the removal of the underbrush opened the stand to the desiccating and sweeping action of the wind. According to statements of the personnel of the station and old residents, no cuttings with the exception of a few dead trees have been made in this stand for at least 30 years.

#### Grazing.

The area classed as a grazed woodland was subjected to grazing during the period 1932 to 1936. It was included in a pasture containing approximately 25 acres, and cows were allowed to graze in the area during the spring and winter months. No grazing was permitted in this woodland prior to 1932. The only noticeable effects of grazing are an absence of sassafras reproduction and a stunted appearance of young elm caused by browsing. The cover of grasses and herbs apparently has not been injured.

#### Fire.

A fire burned over the entire watershed in the late summer of 1925 and this is the only known time that the area ever burned. The fire was very severe as it killed practically all the trees under 4 inches D.B.H. and left basal scars on most of the larger ones. A portion of the cemetery was burned in 1936.



killing brush and young reproduction growing around the border of the area.

#### Cultural Influences.

The past custom of annually scraping the cemetery of all vegetation has probably influenced both the rate and amount of soil and water loss from the area.

The two roadways, one traversing and the other bounding the watershed on the upper side, have undoubtedly affected the hydrologic characteristics of the area. This influence, however, is probably minimized as they are located on the upper side of the watershed and separated from the gaging station by the wooded area.

#### Ice Damage.

An ice glaze in January 1937 severely damaged the standing timber. Approximately 35 percent of the trees lost one-third or more of their crown area by breakage. The greatest damage was caused by the upper one-third of the crown breaking free of the tree. Stripping of side branches was also prevalent. Fungus has entered through many of the scars as 13 percent of the trees show defect from various diseases. Nine trees have died as a result of disease within the past 2 years.

#### Woodland Description.

The woodland portion of the watershed contains a typical virgin stand of black jack - post oak type. It is uneven-aged in character but shows a decided lack of trees in the smaller





diameter classes. In addition to black jack and post oaks, which are the predominant species, the black oak shows a more rapid rate of growth and attains larger diameters than any of the other species.

The average height of the dominant trees is 60 feet. The average age of trees 4 inches D.B.H. is 15 years. The crowns are usually long, extending at least two-thirds the length of the tree. Many of the larger trees have wide spreading crowns extending almost to the ground.

Practically all of the oaks are of coppice origin. Reproduction of these species is originating from both root and stool sprouts. Seedling reproduction of the oaks is sparse. Red cedar is becoming established over the area and should form an important component of the stand within a few years.

There is a sufficient amount of reproduction present to maintain the stand at its present density but not enough to give adequate protection to the site. It is believed that the fire of 1925 combined with the ice glaze and grazing damage has caused the present scarcity of young trees and reproduction.

The approximate spacing of the trees is 25 feet. The density of crown cover is estimated to be three-tenths for the wooded portion of the watershed. Openings within the stand are covered with various grasses, weeds, and brush, the density varying with the size of the opening. A mixture of grass, weeds, vines, and brush apparently forms a better protective cover in the woodland area than grass or brush alone. In the grassland area the coverage is very dense with a mixture of both bunch and sod types of grasses.



Ground Cover.

Litter has accumulated to depths varying up to 2 inches where vines or clumps have prevented its movement by the wind. In such areas there is a good layer of humus formed by the decay of small twigs and leaves. Approximately 11 percent of the entire watershed is classed as barren of litter or vegetation within 4 inches of the ground surface. The roadway traversing the watershed accounts for one-third of the bare area; the remainder is found under the low crowns of the larger trees where competition and shade prevent the establishment of low forms of vegetation. Wind sweep prevents the accumulation of litter in these spots. The bare areas are usually less than 7 feet in diameter. Litter and leaves cover approximately one-half the surface of the watershed, while grass and low vegetation cover over one-third. This coverage, plus that afforded by the brush and tree crowns, forms good but not maximum protection to the area. Table 4 presents information by types.

It is believed that the wooded area will become more effective when an understory of young trees becomes established. At present most of the stand is so open that wind currents prevent the normal accumulation of leaves and litter, thus retarding or preventing the formation of a humus layer. Information is summarized by types in table 5.

It is the opinion of the Superintendent of the Experiment Station that the density of cover on the watershed, principally



brush, has increased during the past few years. However, records of surface run-off and soil loss (table 6) do not show that the increase has influenced surface run-off. The amount of soil lost has actually shown an increase each year.



## FORESTED WATERSHED, AREA 7.936 ACRES

Arkansas-Louisiana-East Texas Sandy Lands Conservation Experiment Station  
Tyler, Texas April 1939

Table 4 Surface Condition, April 1939<sup>1</sup>

Type	Area	Percentage of total watershed	Surface			Ground Cover	
			Bare		Not bare	Litter and Leaves	Grass and Leaves
			Soil	Rock			
	Acres	Percent	Percent	Percent	Percent	Percent	Percent
Grazed Woodland	4.730	59.7	8.7	.0	91.3	76.4	23.6
Ungrazed Woodland	1.159	14.6	27.7 <sup>2/</sup>	1.5 <sup>2/</sup>	70.8 <sup>2/</sup>	73.9 <sup>3/</sup>	26.1 <sup>3/</sup>
Roadway	.249	3.1	-	-	-	-	-
Cemetery	.763	9.6	5.1	.0	94.9	.0	100.0
Grassland	1.035	13.0	2.1	.0	97.9	.0	100.0
	7.936	100.0	10.7	0.3			
			10.6 <sup>2/</sup>		89.1 <sup>2/</sup>	57.8 <sup>3/</sup>	42.2 <sup>3/</sup>

<sup>1</sup>Based upon 394 square-foot plots.<sup>2</sup>Roadway included.<sup>3</sup>Roadway excluded.

Table 5 Summary of Forest Inventory by Types

Type	Percentage of total watershed area	Basal area per acre	Trees per acre	Average D.B.H.	Growth Percent	Average spacing of trees	Surface Condition	
							Bare	Not bare
	Percent	Sq. Ft.	Number	Inches		Feet	Percent	Percent
Grazed Woodland	59.7	44.82	76	10.5	3.1	24.0	8.7	91.3
Ungrazed Woodland	17.7 <sup>1/</sup>	65.66	73	12.8	4.1	24.1	29.2 <sup>1/</sup>	70.6 <sup>1/</sup>
Cemetery	9.6	36.77	59	10.7	3.9	27.0	5.1	94.9
Grassland	13.0	-	-	-	-	-	2.1	97.9
Totals and Average	100.0	39.71	61		3.2		10.9 <sup>1/</sup>	89.1 <sup>1/</sup>

<sup>1</sup>Roadway included

Table 6 Rainfall, Run-off, and Soil Loss - Station #3

Area - 7.94 Acres

Average slope - 7.5 percent

Hydrologic Records  
begun 1933Soil - Kirvin  
fine sandy loam

Year	Rainfall	Surface Run-off		Soil Loss in Run-off
		Amount	Percentage of total rainfall	
	Inches	Inches	Percent	Tons per Acre
1933	48.10	0.23	0.48	0.028
1934	36.85	2.95	8.01	0.039
1935	50.30	1.72	3.42	0.082
1936 <sup>1</sup>	35.60	2.159	6.06	1.040
1937	39.28	0.067	0.17	0.016
1938	31.91	1.147	3.59	0.141

<sup>1</sup>Records for rain of May 8-10 not included.







Plate I - Run-off measuring equipment, wooded watershed No. 3, showing  
silt box, sample tank, flume and recorder shelter, April 26, 1940.



Plate II - Run-off measuring equipment, cultivated watershed No. 4,  
showing silt box, sample tank, flume and recorder shelter,  
April 26, 1940.





Plate III - Run-off measuring station No. 4, looking downhill. Vetch had been plowed under before preparation for planting cotton, April 26, 1940.



Plate IV - Cultivated watershed No. 4 showing gully formation above run-off station, May 26, 1939.





Plate V - Run-off measuring equipment, strip-cropped, watershed No. 5.  
Strip above flume is oats with alternate strips of vetch plowed  
under in preparation for planting cotton, April 26, 1940.



Plate VI - Strip-cropped watershed No. 5 showing strip-cropped area just  
prior to oats harvest, May 26, 1939.





Plate VII - This area was retired from cultivation in 1932. It has an excellent cover of various species of grasses and herbageous vegetation. Reproduction of tree species is noted in left foreground. Angle S. 88° W. April 6, 1939.



Plate VIII. The large Red Cedar trees in this area were planted as markers for graves. Annual "graveyard workings" prevented the growth of an understory of brush. Angle N. 48° W. April 6, 1939.







Plate IX - The lack of grazing has resulted in a luxuriant growth of brush and herbaceous vegetation. Angle N. 31° E. April 6, 1939.



Plate X - Scattered large trees with a comparative absence of trees in the smaller diameter classes are characteristic of this type. Angle S. 31° W. April 6, 1939.







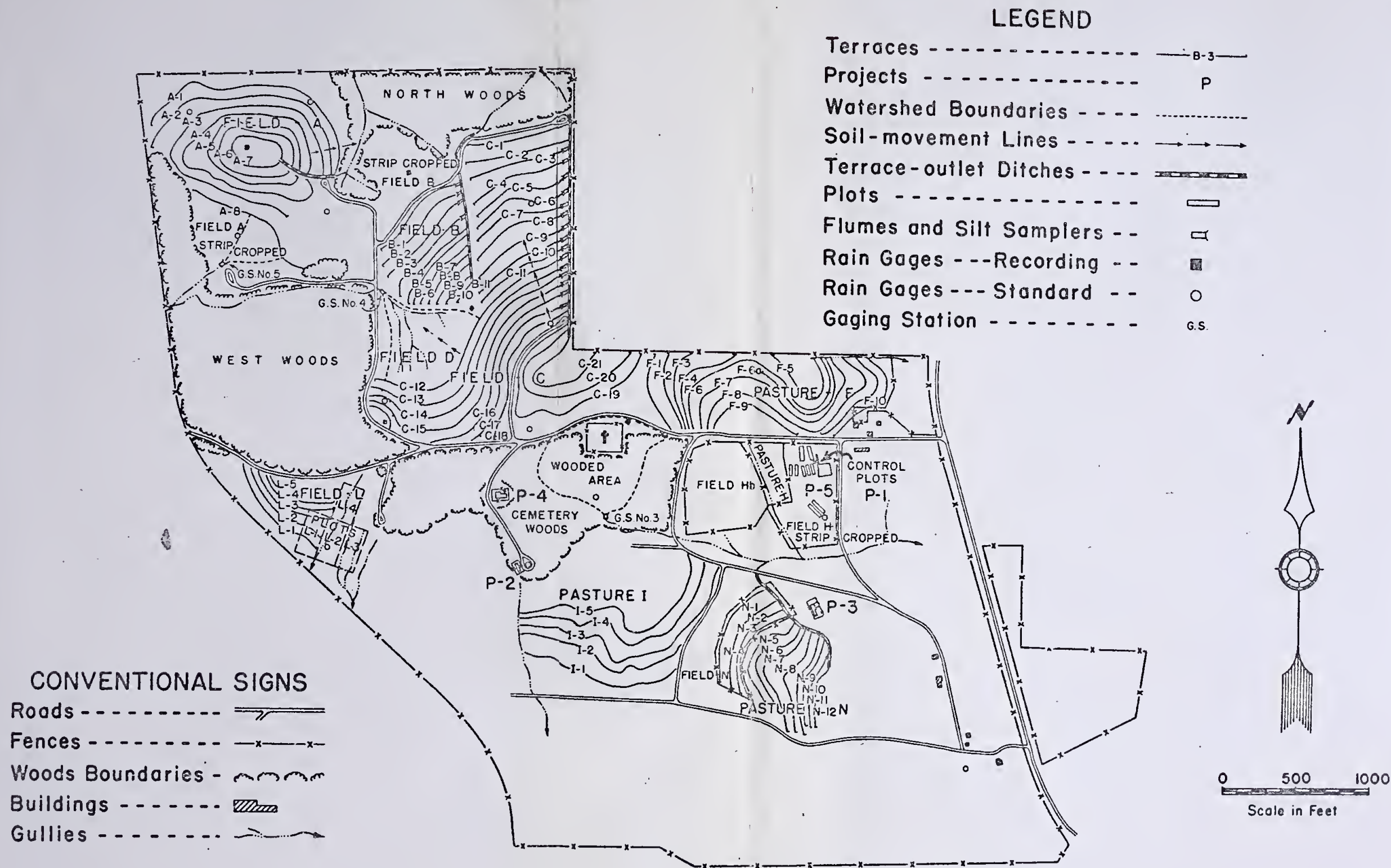


Figure 1- Map of the Soil and Water Conservation Experiment Station and the Texas Agricultural Experiment Substation, No. 2, Tyler, Tex.









# SOILS LEGEND



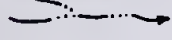

Depth, A Horizon

Bowie - - - - - B  
Orangeburg - - O  
Nacogdoches - N  
Kirvin - - - - - K  
Susquehanna - S  
Colluvium - - - - - C

c - Clay - - - - - O  
t - Thin - - - - - 1-8"  
n - Normal - - - - - 9-15"  
d - Deep - - - - - 16-24"  
vd - Very Deep - 24-36"  
g - Gravelly

Soils are Fine Sandy Loams unless eroded to Clay Subsoil  
✓ = Large Rock

## CONVENTIONAL SIGNS

Roads - - - - -  
Fences - - - - - x - x -  
Woods Boundaries -   
Buildings - - - - -   
Gullies - - - - -   
Soil Boundaries - - - - -  
Plots - - - - -   
Terraces - - - - - C-2  
Watershed Boundary - - - - -

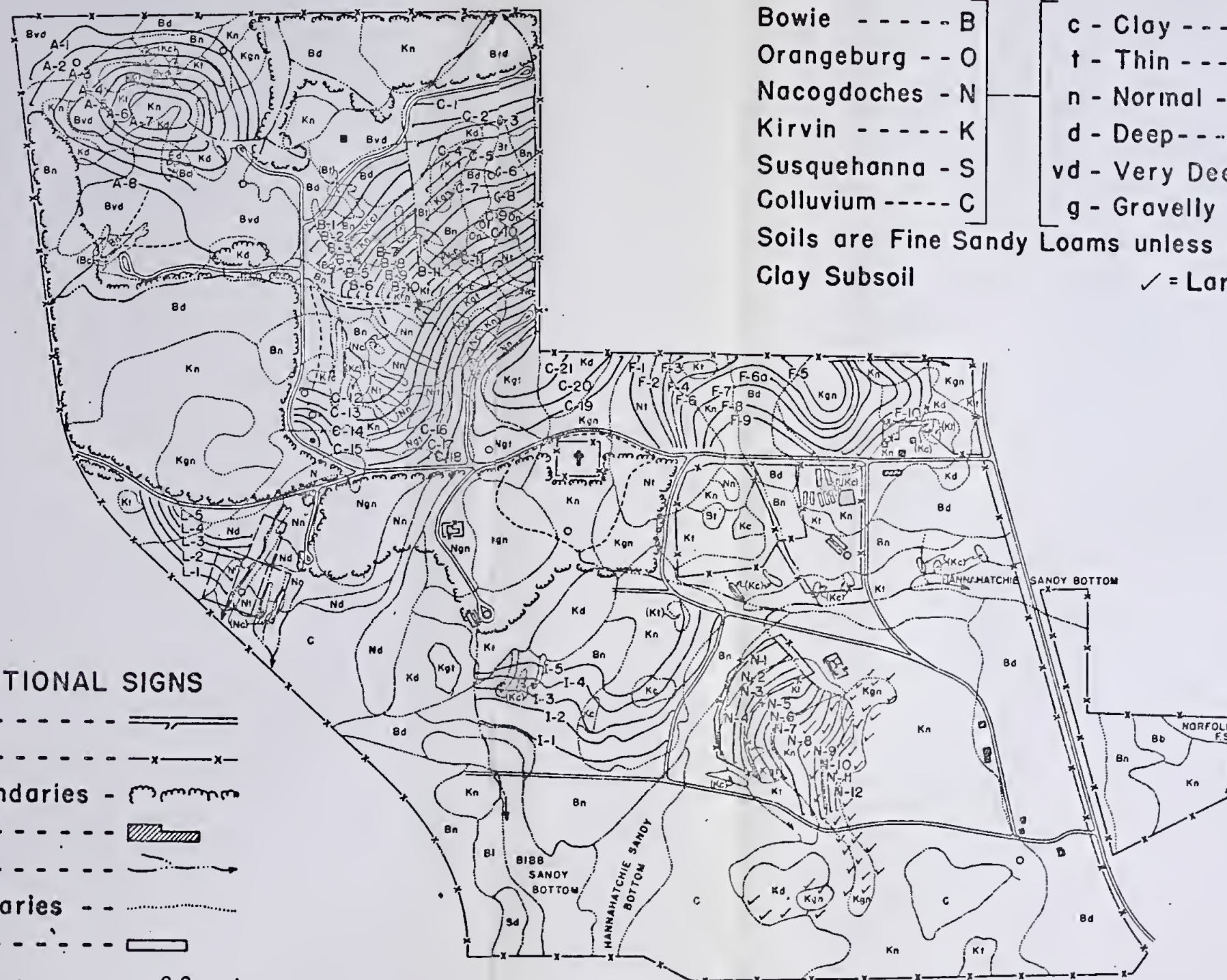
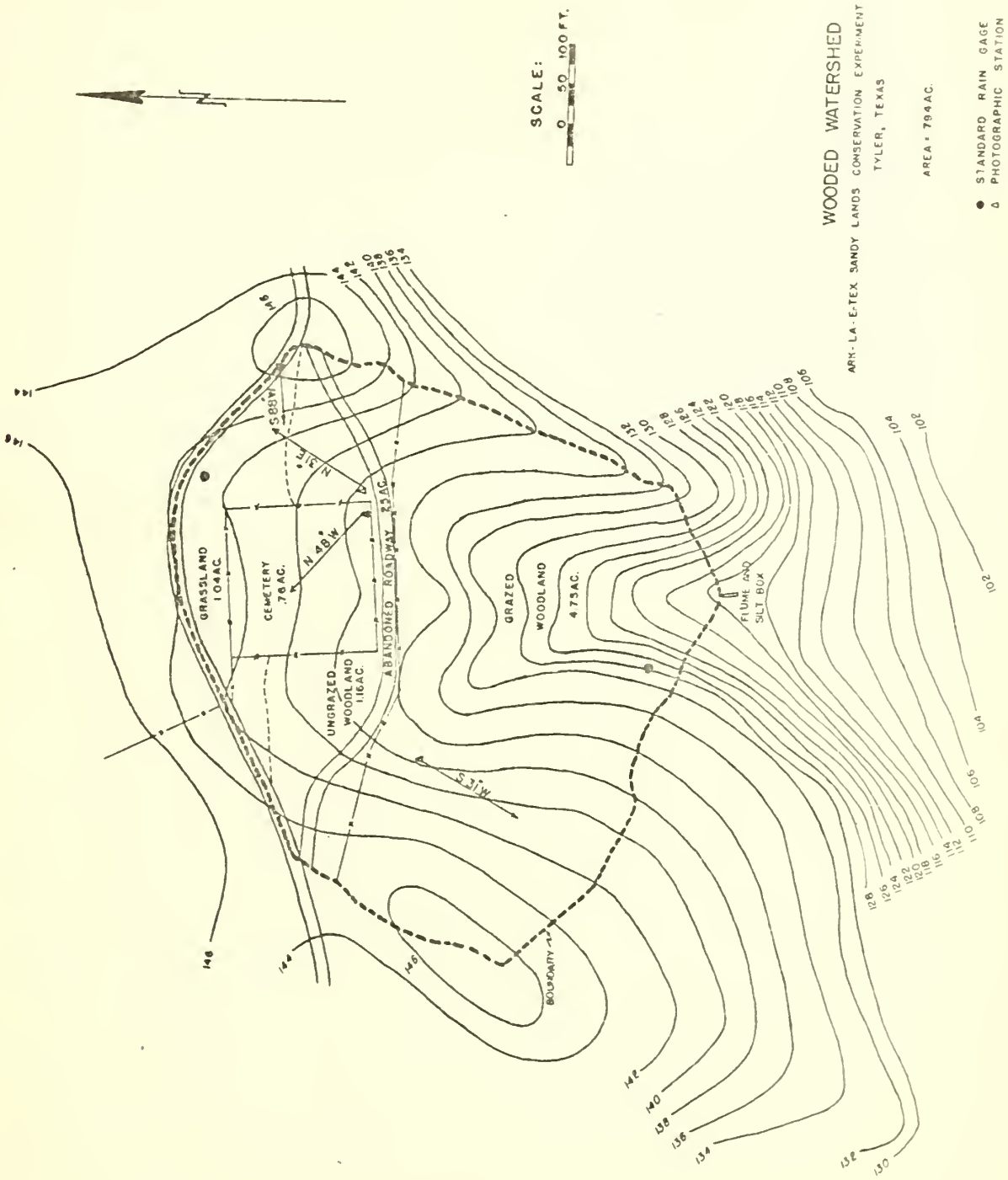


Figure 2.- Soil Map of the Soil and Water Conservation Experiment Station and the Texas Agricultural Experiment Substation, No. 2, Tyler, Tex.





SCALE:  
0 50 100 FT.

# WOODED WATERSHED

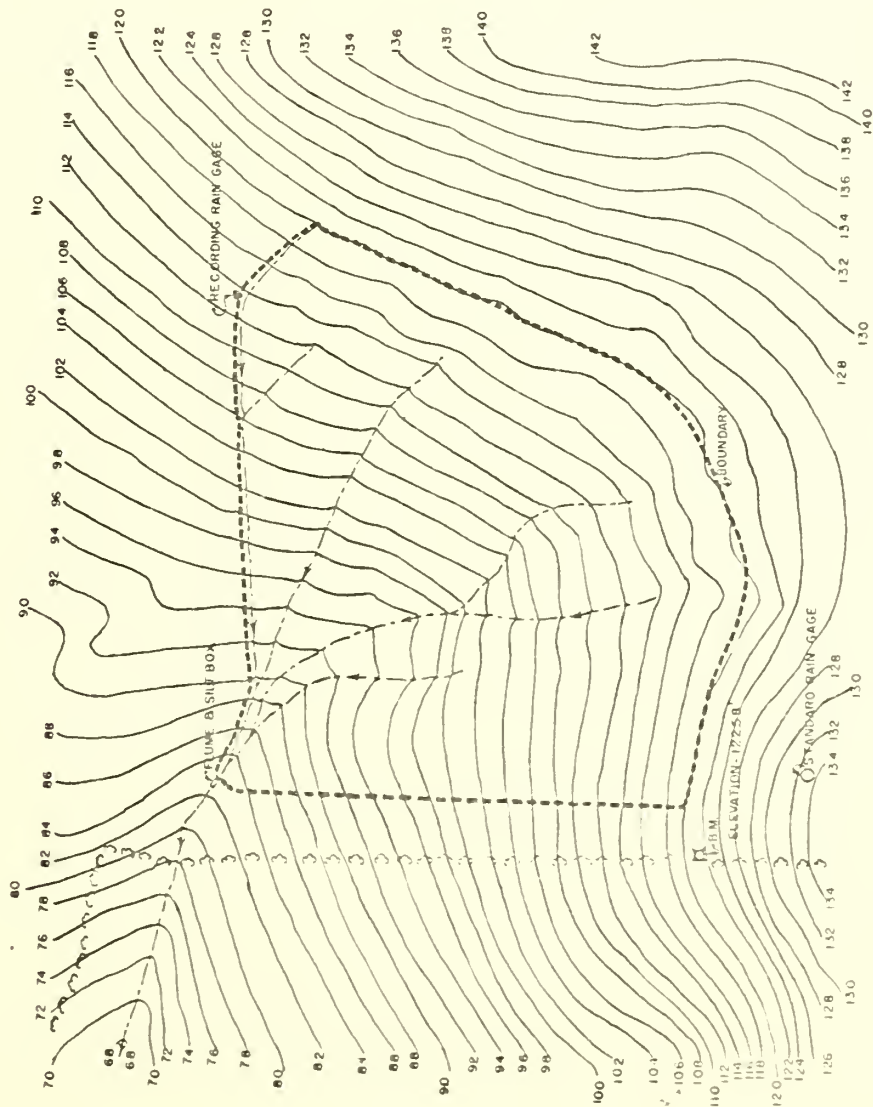
APR. LA. E-TEX SANDY LANDS CONSERVATION EXPERIMENT STATION  
TYLER, TEXAS

AREA - 794 AC

- STANDARD RAIN GAGE
- △ PHOTOGRAPHIC STATION

FIGURE 3.- MAP OF WOODED WATERSHED NO. 3





# CULTIVATED WATERSHED

ARK-LA-E-TEX SANDY LANDS CONSERVATION EXPERIMENT STATION

TYLER, TEXAS

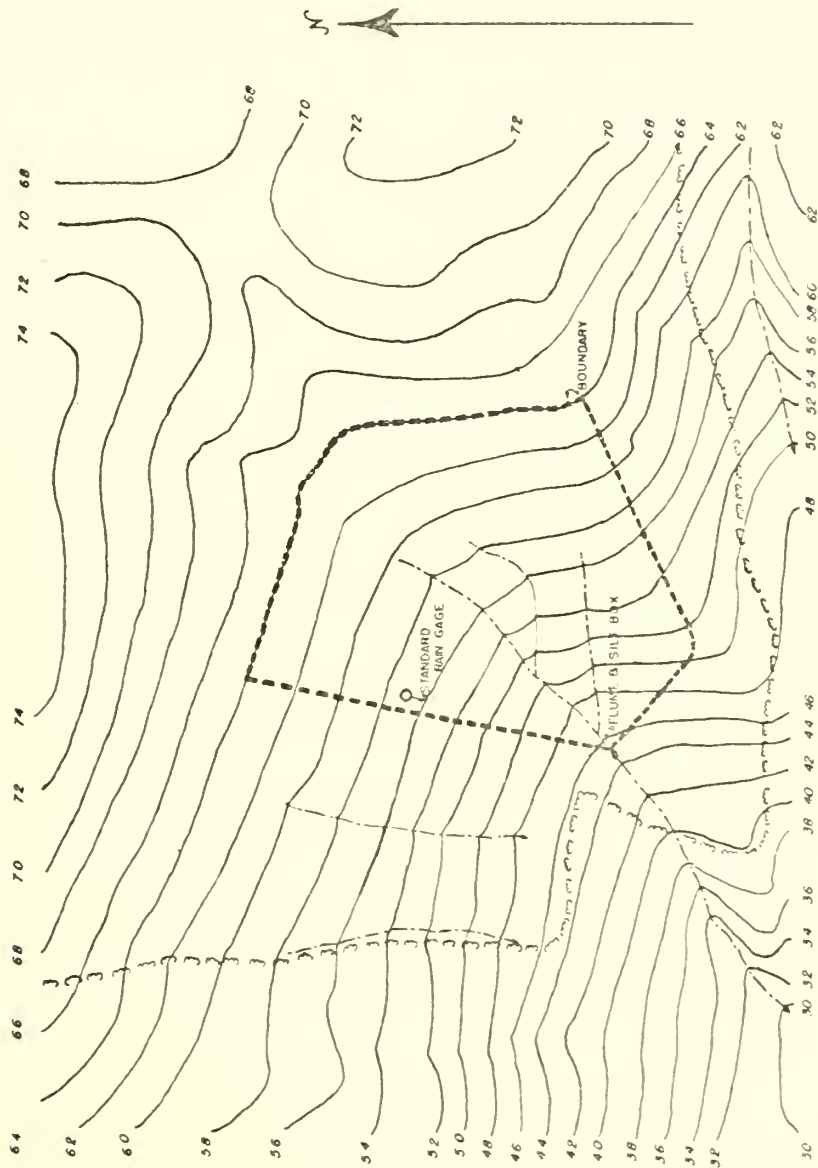
AREA 6,052 ACRES

FIGURE 4.- MAP OF CULTIVATED WATERSHED NO. 4





RECORDING RAIN GAGE



# STRIP-CROPPED WATERSHED

ARK-LA-TEX SANDY LANDS CONSERVATION EXPERIMENT STATION

TYLER, TEXAS

AREA 264.7 ACRES

SCALE

0 50 100 FT.

FIGURE 5.- MAP OF STRIP-CROPPED WATERSHED NO. 5

JUNE 1940

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1931



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

MONTH: Jan. Feb. Mar. Apr. May, 1931

## RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

PROJECT: SCS Experiment Station, Tyler, Texas

SHEET: 1 OF 3

Date	Watershed	Rainfall				Temperature (degrees F)				Run-off			Rainfall Station (elevation)	Run (total per acre)	Description of Watershed
		Amount (inches)	Maximum Intensity		Duration (minutes)	Page (hour)	Upland No.	Area (acres)	No.	Amount (inches)	Ended (hour)	Amount (inches)	Time	Run (total per acre)	
			8 minutes (inches per hour)	30 minutes (inches per hour)											
Jan. 4-5	4	6.383	0.72	0.49	0.34	0.15	1-F-C	1.551M	0.90	58-54	NRQ	NRQ			Rye cover crop since fall of 1930
Jan. 10-11	4	6.383	0.12	0.12	0.08	920	1-F-C	1.010M	0.43	46-45	NRQ	NRQ			Rye 3"
Jan. 17	4	6.383	0.12	0.08	0.04	290	1-F-C	1.110M	0.34	53	NRQ	NRQ			Rye 3"
Feb. 1-2	4	6.383	0.24	0.12	0.09	1100	1-F-C	1.055M	0.48	68-62	NRQ	NRQ			Rye 2"-3"
Feb. 8	4	6.383	0.60	0.49	0.44	478	1-F-C	2.022M	0.59	67	NRQ	NRQ			Rye 4"
Feb. 11-12	4	6.383	0.43	0.32	0.30	1039	1-F-C	3.335M	0.64	69-63	NRQ	NRQ			Rye 5"
Feb. 15	4	6.383	0.24	0.16	0.10	315	1-F-C	3.130M	0.31	50	NRQ	NRQ			Rye 5"
Feb. 20	4	6.383	1.22	0.84	0.46	276	1-F-C	1.027M	0.71	65	NRQ	NRQ			Rye 5"-6"
Feb. 27	4	6.383	0.24	0.24	0.18	1080	1-F-C	2.130M	0.64	52-54	NRQ	NRQ			Rye 6"
Mar. 1-2	4	6.383	0.60	0.36	0.22	1530	1-F-C	6.100M	0.61	54-51	NRQ	NRQ			Rye 6"
Mar. 6	4	6.383	0.84	0.48	0.26	473	1-F-C	2.152M	0.51	68	NRQ	NRQ			Rye 7"
Mar. 11-12	4	6.383	1.80	1.08	0.64	600	1-F-C	1.010M	0.61	70-67	NRQ	NRQ			Rye plowed under Mar. 7
Mar. 15	4	6.383	1.20	0.64	0.48	235	1-F-C	6.135M	0.73	61	NRQ	NRQ			Produced 15.6 tons per acre
Mar. 20	4	6.383	0.60	0.28	0.18	260	1-F-C	2.155M	0.29	51	NRQ	NRQ			Plowed, no crop planted
Mar. 25	4	6.383	0.75	0.26	0.18	780	1-F-C	1.571M	0.75	55-49	NRQ	NRQ			Bare, loose
Apr. 9	4	6.383	1.08	0.48	0.24	10	1-F-C	1.451M	0.12	73	NRQ	NRQ			Bare, loose
Apr. 10	4	6.383	0.60	0.52	0.34	68	1-F-C	6.112M	0.24	80	NRQ	NRQ			Recently plowed
Apr. 15-16	4	6.383	1.08	0.68	0.60	240	1-F-C	8.251M	0.85	77-78	NRQ	NRQ			Recently disked
Apr. 20-21	4	6.383	0.24	0.12	0.10	715	1-F-C	2.100M	0.31	60-59	NRQ	NRQ			Loose, planted in cotton
Apr. 24	4	6.383	0.96	0.80	0.56	257	1-F-C	12.201M	1.38	67	NRQ	NRQ			Loose, cotton not up
May 4	4	6.383	2.16	1.16	0.60	16	1-F-C	2.159M	0.34	79	NRQ	NRQ			Plowed, cotton emerging
May 5	4	6.383	0.24	0.24	0.24	273	1-F-C	3.000M	0.20	76	NRQ	NRQ			Cotton just up
May 5	4	6.383	0.24	0.12	0.08	90	1-F-C	6.121M	0.06	76	NRQ	NRQ			Cotton up, good stand
May 5	4	6.383	0.24	0.12	0.08	90	1-F-C	6.121M	0.06	76	NRQ	NRQ			Cotton up, good stand

All run-off measurements prior to Feb. 1, 1931 taken at Troup, Texas



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Photo also Experiment Station, Tyler, Texas

Phone 100 Experiment Station, Tyler, Texas

Weathered			Rainfall						Temperature (Observed & F)			Rivers					Mainfall Minor (Inches)	Rip Line (tons per acre)	Condition of Watershed	
No. per	Area (acres)	Stage No.	Rising (hours)	Interim (minutes)	Amount (cubins)	Maximum Temperature			Maximum	Minimum	Rising (hours)	Ended (hours)	Amount (cubins)	Maximum Rate						
						8 minutes (Inches per hour)	16 minutes (Inches per hour)	30 minutes (Inches per hour)						Cts. ft. sec.	Time					
																(8)				(16)
1911	2	(1)																		(10)
July 1	4	6.303	1-F-C	12:00AM	1470	0.67	0.56	0.88	0.84	76-73	65-60	NRO								Cotton 2"-3"
July 2	4	6.303	1-F-C	5:15PM	145	0.23	0.72	0.24	0.16	73	60	NRO								Cotton 2"-3"
July 3	4	6.303	1-F-C	11:20AM	89	0.10	0.24	0.12	0.08	73-74	60-59	NRO								Cotton 2"-3"
July 4	4	6.303	1-F-C	2:03AM	27	0.18	1.56	0.64	0.34	93	67	NRO								Cotton 4"-6"
July 5	4	6.303	1-F-C	3:40AM	80	1.40	3.60	3.00	2.12	93	67	4:08PM	6:11PM	0.358	6.53	4:16PM	1.042			Cotton 4"-6"
July 6	4	6.303	1-F-C	2:31PM	1020	2.11	4.08	3.20	2.70	89-86	64-68	2:51PM	4:45PM	0.826	21.10	3:00PM	1.264			Cotton 5"-8"
July 7	4	6.303	1-F-C	4:05PM	223	0.52	0.24	0.16	0.16	94	66	NRO								Cotton 10"-24"
July 8	4	6.303	1-F-C	5:12PM	35	0.43	1.20	0.92	0.76	97	70	NRO								Cotton 10"-24"
July 9	4	6.303	1-F-C	6:45PM	140	0.55	0.72	0.64	0.50	92	72	NRO								Cotton 10"-24"
July 10	4	6.303	1-F-C	1:45AM	195	0.19	0.12	0.08	0.06	85	74	NRO								Cotton 13"-20"
July 11	4	6.303	1-F-C	9:10AM	360	0.13	0.24	0.12	0.10	85	74	NRO								Cotton 13"-20"
July 12	4	6.303	1-F-C	2:40PM	100	0.50	1.68	1.12	0.82	94	71	NRO								Cotton 15"-30"
July 13	4	6.303	1-F-C	9:45AM	134	0.55	2.40	0.92	0.46	88	71	NRO								Cotton 15"-30"
July 14	4	6.303	1-F-C	5:30AM	852	0.56	0.96	0.48	0.24	89-84	61-63	NRO								Cotton 20"-30"
July 15	4	6.303	1-F-C	6:05AM	517	1.87	2.16	1.76	1.48	82	64	6:13AM	10:50AM	0.034	0.71	7:52AM	1.636			Cotton 20"-30"
July 16	4	6.303	1-F-C	11:34AM	73	0.32	2.76	1.16	0.60	87	70	11:51AM	12:21PM	0.019	0.82	11:54AM	0.301			Cotton 20"-30"
July 17	4	6.303	1-F-C	3:00AM	185	0.63	2.28	1.36	0.76	87	66	3:41AM	4:00AM	0.002	0.09	3:46AM	0.628			Cotton 20"-30"
July 18	4	6.303	1-F-C	7:00AM	40	0.14	0.36	0.32	0.20	88	74	NRO								Cotton 24"-30"
July 19	4	6.303	1-F-C	8:02AM	183	0.26	0.24	0.20	0.12	83	67	NRO								Cotton 24"-30"
July 20	4	6.303	1-F-C	11:25AM	245	0.58	3.60	1.36	0.68	78	66	2:14PM	2:33PM	0.005	0.15	2:17PM	0.375			Cotton 24"-30"
July 21	4	6.303	1-F-C	12:40AM	455	1.21	1.20	0.88	0.66	80	62	1:05AM	1:23AM		0.03	1:08AM				Cotton 24"-30"
July 22	4	6.303	1-F-C	12:40AM	455	1.21	1.20	0.88	0.66	80	62	1:46AM	2:06AM	0.002	0.03	1:49AM	1.208			Cotton 24"-30"



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UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH Oct-Nov-Dec, 1931  
 SHEET 3 OF 3 SHEETS

## RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

PROJECT SOIL Experiment Station, Taylor, Texas

U. S. GOVERNMENT PRINTING OFFICE: 1924

Date	Watershed		Rainfall				Temperature		Runoff				Runoff Cm. ft. sec.	Time	Runoff Cm. ft. sec.	Runoff Cm. ft. sec.	Runoff Cm. ft. sec.	Runoff Cm. ft. sec.
	Number	Area (acres)	Usage No.	Begin (hour)	Duration (minutes)	Amount (inches)	8 minutes (inches per hour)	15 minutes (inches per hour)	30 minutes (inches per hour)	Maximum	Minimum	Phase (hour)	Peak (hour)	Amount (inches)	Time	Amount (inches)	Time	Amount (inches)
1931	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Oct. 20	4	6.383	1-F-C	12:15AM	125	0.35	0.60	0.40	0.40	71	54	NHO						Cotton fields
Nov. 10	4	6.383	1-F-C	4:15PM	140	0.09	0.24	0.16	0.08	69	61	NHO						Fallow, loose, bare
Nov. 11	4	6.383	1-F-C	2:45PM	115	0.19	0.60	0.24	0.16	76	64	NHO						Rye and oats planted 12th
Nov. 15	4	6.383	1-F-C	3:55AM	5	0.04	0.48	0.16	0.08	80	66	NHO						Rye and oats, some emerging
Nov. 17	4	6.383	7-P-4	4:30AM	350	0.29	0.72	0.48	0.30	73	58	NHO						Rye and oats, small
Nov. 19	4	6.383	1-F-C	7:00PM	214	0.85	3.60	2.64	1.48	69	52	7:22PM	7:45PM	0.003	0.04	7:25PM	0.647	Rye and oats, small
Nov. 21	4	6.383	1-F-C	11:57AM	18	0.04	0.12	0.12	0.08	63	44	NHO						Rye and oats, 1 <sup>st</sup> -2 <sup>nd</sup>
Nov. 23	4	6.383	1-F-C	2:16AM	154	0.14	0.24	0.12	0.10	74	47	NHO						Rye and oats, 1 <sup>st</sup> -2 <sup>nd</sup>
Nov. 25	4	6.383	1-F-C	5:50AM	565	0.06	0.48	0.36	0.32	49	41	NHO						Rye and oats, 1 <sup>st</sup> -2 <sup>nd</sup>
Nov. 27	4	6.383	1-F-C	1:40AM	2450	1.20	1.32	0.80	0.56	47-55	42-46	9:03AM	2:00AM	0.005	0.08	9:06AM	1.195	Rye and oats, 2 <sup>nd</sup> -3 <sup>rd</sup>
Dec. 1	4	6.383	1-F-C	10:40AM	835	1.06	0.60	0.48	0.28	46-43	41-37	4:44AM	5:35AM	0.017	0.10	4:56AM	1.043	Rye and oats, 2 <sup>nd</sup> -3 <sup>rd</sup>
Dec. 2	4	6.383	1-F-C	5:45PM	200	0.16	0.24	0.16	0.12	43	37	NHO						Rye and oats, 2 <sup>nd</sup> -3 <sup>rd</sup>
Dec. 5	4	6.383	1-F-C	4:20PM	1000	0.49	0.24	0.16	0.14	52-45	43-60	NHO						Rye and oats, 3 <sup>rd</sup> -4 <sup>th</sup>
Dec. 10	4	6.383	7-P-4	9:55AM	905	0.52	4.32	1.84	0.92	70-71	49-59	1:00PM	2:30PM	0.079	1.88	1:07PM	0.441	Rye and oats cover, 3 <sup>rd</sup> -4 <sup>th</sup>
Dec. 12	4	6.383	7-P-4	5:20PM	1325	0.12	0.24	0.08	0.08	59-71	54-41	NHO						Rye and oats, 3 <sup>rd</sup> -4 <sup>th</sup>
Dec. 16	4	6.383	7-P-4	4:28AM	1715	2.10	0.62	0.62	0.36	48-48	40-41	10:44AM	1:56PM	0.165	1/0.93	1:32PM	1.935	Rye and oats, 3 <sup>rd</sup> -4 <sup>th</sup>
Dec. 18	4	6.383	7-P-4	12:45PM	1470	0.44	0.24	0.16	0.16	48-53	36-42	NHO						Rye and oats, 2 <sup>nd</sup> -4 <sup>th</sup>
Dec. 19	4	6.383	7-P-4	5:25PM	245	0.50	0.72	0.36	0.26	53	42	7:03PM	10:25PM	0.025	0.13	9:05PM	0.475	Rye and oats, 3 <sup>rd</sup> -4 <sup>th</sup>
Dec. 21	4	6.383	7-P-4	3:20AM	90	0.07	0.12	0.08	0.06	53	44	NHO						Rye and oats, 3 <sup>rd</sup> -4 <sup>th</sup>
Dec. 23	4	6.383	7-P-4	4:20PM	80	0.17	1.32	0.48	0.24	78	58			0.010			0.16	Rye and oats, 3 <sup>rd</sup> -4 <sup>th</sup>
Dec. 26	4	6.383	7-P-4	5:20AM	100	0.97	3.84	3.40	1.86	71	52	5:37AM	7:05AM	0.410	12.01	5:50AM	0.56	Rye and oats, 3 <sup>rd</sup> -4 <sup>th</sup>

J. Dec. 16, 1931













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13514





1965



1932





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

MONTH Jan. Feb. Mar. Apr. 19 32

Project 1365 Experiment Station, Tyler, Texas

## RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

SHEET 1 OF 6 SHEETS

Date	Watershed		Rainfall						Tillage Unit (Section 5)			Run-off				Rainfall Minutes (hours)	Rise Low (feet per acre)	Condition of Watershed
	Number	Area (acres)	Gage No.	Depth (inches)	Duration (minutes)	Amount (inches)	Maximum Intensity		Maximum	Minimum	Depth (inches)	Flooded (hours)	Amount (inches)	Maximum Rate				
							5 minutes (inches per hour)	10 minutes (inches per hour)						Cu. Ft. Sec.	Time			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1932																		
Jan. 3-4	4	6.493	7-P-4	11:55PM	1510	5.70	2.64	2.12	2.06	54-51	42-43	7:40AM	2.114	12.74	8:43PM	3.59		Rye & oats; cover about 3-4" fair stand
Jan. 5	4	6.403	7-P-4	8:30AM	1185	2.02	1.08	0.80	0.68	55	50	11:58AM	1:55PM	1.50	12:18PM			Rye & oats; cover about 3-4" fair stand
Jan. 11	4	6.383	7-P-4	10:00AM	1132	0.44	0.60	0.40	0.32	75-72	63-50	5:20PM	6:15PM	1.44	6:25PM	1.482		Rye & oats; cover about 3-4" fair stand
Jan. 14-15	4	6.403	7-P-4	4:35PM	695	0.31	1.08	0.52	0.36	64	48	2:13AM	3:00AM	0.22	5:35PM	0.426		Rye & oats; cover about 3-4" fair stand
Jan. 17	4	6.383	1-F-C	6:00AM	975	0.28	0.36	0.20	0.12	69	47	NRO		0.15	2:30PM	0.295		Rye & oats; cover about 3-4" fair stand
Jan. 22	4	6.383	1-F-C	6:00AM	975	0.28	0.36	0.20	0.12	69	47	NRO		0.06	4:25AM	0.295		Rye & oats; cover about 3-4" fair stand
Jan. 25	4	6.383	1-F-C	4:15AM	1320	0.85	0.40	0.32	0.18	44	39	12:15PM	1:05PM	0.03	12:45PM			Rye & oats; cover about 3-4" fair stand
Jan. 29	4	6.403	1-F-C	6:35AM	295	0.35	0.24	0.24	0.16	65	36	1:15PM	1:55PM	0.12	1:30PM	0.840		Rye & oats; cover about 3-4" fair stand
Feb. 1	4	6.453	1-F-C	4:00PM	1800	0.40	0.36	0.16	0.10	51	43	NRO						Rye & oats; cover about 3-4" fair stand
Feb. 11	4	6.483	1-F-C	2:33AM	147	0.50	1.20	1.04	0.56	76	56	2:35AM	3:15AM	0.33	2:40AM	0.486		Rye & oats; cover about 3-4" fair stand
Feb. 13	4	6.383	1-F-C	6:33PM	192	1.11	0.60	0.32	0.22	64	50	NRO						Rye & oats; cover about 3-4" fair stand
Feb. 13-15	4	6.463	1-F-C	9:15PM	991	0.85	0.36	0.36	0.28	60-53	51-46	3:43AM	5:20AM	0.22	4:15AM			Rye & oats; cover about 3-4" fair stand
Feb. 16	4	6.403	1-F-C	2:10PM	215	0.40	1.20	0.96	0.60	72	50	2:19PM	3:45PM	0.04	6:10AM	0.825		Rye & oats; 3"-4"; fair stand
Feb. 16	4	6.403	1-F-C	2:10PM	215	0.40	1.20	0.96	0.60	72	50	2:19PM	3:45PM	2.01	2:30PM	0.318		Rye & oats; 3"-4"; fair stand
Feb. 18	4	6.483	1-F-C	5:16AM	1810	1.90	0.40	0.38	0.34	47-48	44-40	9:25AM	10:35AM	0.41	9:55AM			Rye & oats; 3"-4"; fair stand
Feb. 21	4	6.483	1-F-C	11:30AM	1230	0.62	0.96	0.76	0.54	49-55	46-40	12:40PM	2:30PM	0.37	12:45PM	1.697		Rye & oats; 4"-5"; fair stand
Feb. 22	4	6.403	1-F-C	8:40AM	435	0.26	0.36	0.16	0.10	55	47	6:30PM	2:15AM	2.20	12:50PM	0.661		Rye & oats; 4"-5"; fair stand
Mar. 2-3	4	6.483	1-F-C	11:18PM	550	1.28	1.42	0.80	0.76	71-70	62-51	11:58PM	3:00AM	0.06	9:30PM	0.661		Rye & oats; 4"-5"; fair stand
Mar. 4	4	6.483	1-F-C	6:27PM	463	1.28	1.08	0.80	0.64	72-68	53-31	6:39PM	9:22PM	1.24	12:20PM	1.112		Rye & oats being turned under
Mar. 7-8	4	6.483	1-F-C	8:10PM	545	0.09				51-41	34-28	NRO		1.11	6:59PM	1.113		Rye & oats being turned under
Mar. 18	4	6.343	1-F-C			0.02								0.46	12:53AM	1.113		Fallow loose
Mar. 27	4	6.403	1-F-C	4:38PM	9	0.19	2.16	0.76	0.38	78	45	NRO						Corn planted 10 to 14th some up
Mar. 30	4	6.403	1-F-C	7:37AM	733	0.65	1.44	0.72	0.64	75	50	NRO						Corn 1-2"
Apr. 7	4	6.483	1-F-C			0.02				74	50	NRO						Corn 2-4"
Apr. 7	4	6.483	1-F-C			0.02				77	63	NRO						Corn 4-8"



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UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
DIVISION OF RESEARCH

MONTH Apr. May, June, 19 32  
SHEET 2 OF 6 NIETS

PROJECT: SGS Experiment Station, Tyler, Texas  
RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

Date	Watershed		Rainfall						Temperature (degree F)		Runoff				Runoff Meters (inches)	Net Loss (load per acre)	Condition of Watershed		
	Number	Area (acres)	Gage No.	Begin (hour)	Duration (minutes)	Amount (inches)	Maximum Intensity			Maximum	Minimum	Begin (hour)	End (hour)	Amount (inches)				Maximum Rate	
							1 minute (inches per hour)	15 minutes (inches per hour)	30 minutes (inches per hour)									Cu ft. sec.	Time
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)		
Apr. 12	4	6.383	1-F-C	12:02AM	465	0.74	1.26	0.45	0.76	77	60	NRO							
	5	1.726	3-F-A			0.70				77	60	NRO					Corn 8-12" Cats recently turned under		
Apr. 12	4	6.383	1-F-C	2:20PM	103	0.28	2.04	0.88	0.44	80	66	NRO							
	5	1.726	3-F-A							80	66	NRO					Corn 12" Fallow loose		
Apr. 13	4	6.383	1-F-C	7:40AM	162	0.50	1.32	0.56	0.32	73	64	NRO							
	5	1.726	1-F-A			0.74				73	64	NRO					Corn about 12-14" Fallow, loose, bare		
Apr. 14	4	6.383	1-F-C	11:57AM	1228	1.93	0.72	0.64	0.48	62	51	3:37PM	9:00PM	0.15	3:40PM	1.816			
	5	1.726	3-F-A			1.93				62	51	5:15AM	7:30AM	0.93	5:42AM	1.807	Corn about 18" Strip cropped, 1/3 broadened sorghum; 2/3 cotton		
May 10	4	6.383	1-F-C	2:15PM	1055	0.60	2.64	1.52	0.84	81-83	65-63	NRO							
	5	1.726	3-F-A			0.60				81-83	65-63	NRO					Corn 30" Cotton up, sorghum emerging		
May 10-16	4	6.383	7-F-A	12:22PM	1040	1.13	2.64	1.92	1.30	81-70	60-60	Silt box	0.004	0.004	No rate	1.126			
	5	1.726	3-F-A			1.13				81-70	60-60	Silt box	0.019	0.019	No rate	1.111	Corn 32" Cotton cult'd May 14; sorghum 1"		
June 9	3	7.936	2-F-Fb			0.11	0.24		0.18	92	65	NRO							
	4	6.383	1-F-C	2:45AM	65	0.11				92	65	NRO					Woods (oaks) in leaf Corn 3'-5'; cow peas planted June		
	5	1.726	3-F-A			0.13				92	65	NRO					Cotton 4-5"; sorghum about 6"		
June 11	3	7.936	2-F-Fb			0.05	0.48		0.14	91	67	NRO							
	4	6.383	1-F-C	4:50PM	70	0.08				91	67	NRO					Woods (oaks) in leaf Corn 3-5'; cow peas emerging		
	5	1.726	3-F-A			0.10				91	67	NRO					Cotton 4-5"; sorghum about 6"		
June 14	3	7.936	2-F-Fb			0.11	0.12		0.06	88	75	NRO							
	4	6.383	7-F-A	4:40PM	120	0.12	0.12	0.08	0.06	88	75	NRO					Woods (oaks) in leaf Corn 4-5"; cow peas about 3"		
	5	1.726	3-F-A			0.11				88	75	NRO					Strip cropped; cotton 6-8"; sorghum about 13"		
June 15	3	7.936	2-F-Fb			1.30	2.88		1.28	88	72	NRO							
	4	6.383	1-F-C	2:10PM	260	1.27				88	72	Silt box	0.016	0.016	No rate	1.254	Woods (oaks) in leaf Corn 1-2 by; cow peas about 3"		
	5	1.726	3-F-A			1.27				88	72	Silt box	0.016	0.016	No rate	1.254	Cotton 6-8"; sorghum about 14"		

See next slide



12/2/20



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH Jun-Jul-Aug., 19 52  
 SHEET 3 OF 6 SHEETS

 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS  
 Project: SCS Experiment Station, Tyler, Texas

Date	Watershed Number	Area (acres)	Gage No.	Basin (sq mi)	Duration (minutes)	Runoff			Maximum Infiltration			Temperature (degrees F)		Runoff			Basin Moisture Reservoir (inches)	Runoff (cfs per acre)	Condition of Watershed
						Amount (inches)	3 minutes (inches per hour)	5 minutes (inches per hour)	10 minutes (inches per hour)	15 minutes (inches per hour)	20 minutes (inches per hour)	Minimum	Maximum	Feet (feet)	Amount (inches)	Time (hr. sec.)	Maximum Rate (inches)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
June 27	3	7.936	2-F-FB			0.11				91	74								Woods (oaks) in leaf
	4	6.383	1-F-C	7115AM	50	0.68	0.60	0.64	0.14	91	74								Corn 4-5"; cow peas about 4"
	5	1.726	3-F-A			0.06				91	74								Cotton 6-8"; sorghum about 16"
July 6	3	7.936	2			1.68				93	74								Woods (oaks) in leaf
	4	6.383	1	8:45AM	118	1.11	2.88	2.68	1.90	93	74								Corn 5-6"; cow peas about 5"
	5	1.726	3			0.99				93	74								Cotton 8-10"; sorghum about 25"
July 11	3	7.936	2			0.24				95	74								Woods (oaks) in leaf
	4	6.383	1	4:15PM	15	0.26	1.44	1.64	0.52	95	74								Corn 6"; cow peas about 6"
	5	1.726	3			0.29				95	74								Cotton 9-12"; sorghum about 30"
July 20	3	7.936	2			0.03				89	76								Woods (oaks) in leaf
	4	6.383	1			0.04				89	76								Corn 6-7"; cow peas about 8"
	5	1.726	3			0.05				89	76								Cotton 10-14"; sorghum about 42"
July 22	3	7.936	2			1.68				95	70								Woods (oaks) in leaf
	4	6.383	1	2:48PM	37	1.13	4.68	3.12	2.14	95	70								Corn 8-9"; mature sorghum 6-12"
	5	1.726	3			1.27				95	70								Cotton 11-13"; sorghum about 43"
July 23	3	7.936	2			0.34				93	75								Woods (oaks) in leaf
	4	6.383	1	10:12AM	115	0.37	1.68	1.12	0.62	93	75								Corn 6-7"; cow peas about 10"
	5	1.726	3			0.45				93	75								Cotton 11-13"; sorghum about 5"
Aug. 8	3	7.936	2			0.37				94	72								Woods (oaks) in leaf
	4	6.383	1	5:15AM	165	0.38	1.20	0.80	0.64	94	72								Corn 6-7"; cow peas about 10"
	5	1.726	3			0.41				94	72								Cotton 14-18"; sorghum about 6"
Aug. 14	3	7.936	2			0.10				90	74								Woods (oaks) in leaf
	4	6.383	1	7:05AM	560	0.13	0.72	0.24	0.14	90	74								Corn 6-7"; cow peas about 20"
	5	1.726	3			0.14				90	74								Cotton 20"; sorghum about 6"
Aug. 17-18	3	7.936	2			0.28				95-91	74-73								Woods (oaks) in leaf
	4	6.383	1	11:55AM	460	0.28	0.36	0.20	0.14	95-91	74-73								Corn 8-9"; cow peas about 10"
	5	1.726	3			0.28				95-91	74-73								Strip cropped, cotton/sorghum

See next page





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH
MONTH: Aug-Sept. Oct. \_\_\_\_\_, 19 32SHEET 4 OF 6 SHEETS

## RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

PROJECT: SCS Experiment Station, Tyler, Texas

S. S. C. EXPERIMENTAL WATERSHEDS, 1932-1933

Date	Watershed		Rainfall				Temperature		Run-off			Blizzard Meter (inches)	City Low (total per day)	Condition of Watershed
	Number	Area (acres)	Open No.	Height (feet)	Duration (minutes)	Amount (inches)	Run-off (inches per hour)	Maximum Intensity (inches per hour)	Minimum	Maximum	Peak (hour)	Amount (inches)	On ft. sq.	Time
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1932 Aug. 16	3	7.936	2-F-Pb	7.40 PM	50	0.76			95-91	74-73	NRO			
	4	6.483	1-F-C			0.43		1.52	91	73	5111 box	0.037	No rate	
	5	1.726	3-E-A			0.82			95-91	74-73	5111 box	0.018	No rate	
Aug. 25	3	7.936	2	5.37 PM	68	0.18		0.12	93	72	NRO			
	4	6.483	1			0.05			93	72	NRO			
	5	1.726	3			0.02			93	72	NRO			
Sept. 1	3	7.936	2	10.00 PM	2100	2.49		0.36	94-76	75-71	NRO			
	4	6.483	1			2.34			94-76	75-71	5111 box	0.035	No rate	
	5	1.726	3			2.28			94-76	75-71	NRO			
Sept. 5	3	7.936	2	3.15 PM	60	0.11		0.12	83	70	NRO			
	4	6.483	1			0.08			83	70	NRO			
	5	1.726	3			0.10			83	70	NRO			
Sept. 15	3	7.936	2	7.48 PM	85	0.20		0.20	91	68	NRO			
	4	6.483	1			0.18			91	68	NRO			
	5	1.726	3			0.20			91	68	NRO			
Sept. 23	3	7.936	2	6.30 AM	255	0.12		0.24	80	66	NRO			
	4	6.483	1			0.14			80	66	NRO			
	5	1.726	3			0.14			80	66	NRO			
Sept. 26	3	7.936	2	1.55 AM	2155	0.12		0.08	71-82	61-64	NRO			
	4	6.483	1			0.12			71-82	61-64	NRO			
	5	1.726	3			0.12			71-82	61-64	NRO			
Oct. 2	3	7.936	2	7.00 AM	868	0.54		0.36	72	64	NRO			
	4	6.483	1			0.52			72	64	NRO			
	5	1.726	3			0.50			72	64	NRO			
Oct. 4	3	7.936	2	12.32 AM	333	0.67		1.32	77	57	NRO			
	4	6.483	1			0.61			77	57	NRO			
	5	1.726	3			0.66			77	57	NRO			

 Woods (oaks) in leaf  
 Corn ripe; peas green; poor stand  
 Cotton 20-24" sorghum 6"

 Woods (oaks) in leaf  
 Corn ripe; cow peas about 24"  
 Strip cropped cotton 20-24"  
 sorghum 6"

 Woods (oaks) in leaf  
 Corn ripe; cow peas 24"  
 Cotton 23-26" sorghum 6"

 Woods (oaks) in leaf  
 Corn ready to harvest; cow peas 24"  
 Cotton 23-26" sorghum 6"

 Woods (oaks) in leaf  
 Corn stalks; cow peas 24"  
 Cotton 24-30" sorghum 6"

 Woods (oaks) in leaf  
 Fallow, loose  
 Cotton 24-30" sorghum 6"

 Woods (oaks) in leaf  
 Oats and rye planted Sept. 23-26  
 Strip cropped cotton 24-30"  
 Sorghum 6"

 Woods (oaks) leaves turning  
 Rye and oats  
 Cotton 24-30" sorghum maturing

 Woods (oaks) leaves turning  
 Rye and oats bad stand  
 Cotton 24-30" sorghum maturing



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH Oct. Nov. Dec., 19 32  
 SHEET 5 OF 6 SHEETS

## RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

 PROJECT SOCS Experiment Station, Tyler, Texas

R. E. SMITH, FIELD RESEARCHER

Date	Watershed			Rainfall			Temperature (degrees F.)			Run-off					Run-off (cfs per acre)	Condition of Watershed		
	Number	Area (acres)	Stage No.	Begin (hour)	Termination (minutes)	Amount (inches)	Maximum Intensity			Peak (hour)	Flood (hour)	Amount (inches)	Maximum Rate					
							3 minutes (inches per hour)	15 minutes (inches per hour)	30 minutes (inches per hour)				Cu ft. sec.	Time				
1932	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Oct. 25	3	7.936	2-P-FB				0.94					NRO						Woods (oaks) leaves brown
	4	6.383	1-P-C	8:16AM	45A		0.78	1.00	0.52	79	49	NRO						Rye and oats; bad stand
	5	1.726	3-P-A				0.74			79	49	NRO						Strip cropped; cotton mature; sorghum harvested
Oct. 30-31	3	7.936	2				0.21			76-72	53-55	NRO						Woods (oaks) shedding
	4	6.383	1	11:07PM	541		0.21	0.36	0.20	76-72	53-55	NRO						Rye and oats; bad stand
	5	1.726	3				0.29			76-72	53-55	NRO						Cotton harvested, Oct. 26-Nov. 3 sorghum stubble
Nov. 7	3	7.936	2				0.15			79	55	NRO						Woods (oaks) few leaves
	4	6.383	1-P-A	7:43PM	8		0.16	0.60	0.30	79	55	NRO						Rye and oats; bad stand
	5	1.726	3				0.18	1.72		79	55	NRO						Cotton stalks; sorghum stubble
Nov. 13	3	7.936	2				0.71			65	49	NRO						Woods (oaks) bare
	4	6.383	1	8:15AM	197		0.56	1.08	0.60	65	49	NRO						Rye and oats; bad stand
	5	1.726	3				0.62	2.52		65	49	NRO						Fallow
Nov. 14	3	7.936	2				0.10			50	38	NRO						Woods (oaks) bare
	4	6.383	1	7:06PM	136		0.08	0.08	0.08	50	38	NRO						Rye and oats; bad stand
	5	1.726	3				0.11	0.12		50	38	NRO						Fallow
Dec. 9-10	3	7.936	2				0.40			47-35	31-31	NRO						Woods (oaks) bare
	4	6.383	1	10:00AM	1430		0.34	0.46	0.24	47-35	31-31	NRO						Rye and oats; bad stand
	5	1.726	3				0.34	0.84		47-35	31-31	NRO						Oats and rye up
Dec. 11	3	7.936	2				0.16			42	35	NRO						Woods (oaks) bare
	4	6.383	1	1:00AM	594		0.14	0.12	0.10	42	35	NRO						Rye and oats; bad stand
	5	1.726	3				0.14	0.24		42	35	NRO						Oats and rye up
Dec. 13-14	3	7.936	2				0.41			29-35	25-30	NRO						Woods (oaks) bare
	4	6.383	1	4:00PM	2400		0.46	0.24	0.22	29-35	25-30	NRO						Rye and oats; bad stand
	5	1.726	3				0.42	0.36		29-35	25-30	NRO						Oats and rye small
Dec. 22-23	3	7.936	2				1.90			63-71	49-63	8:05AM	9:05AM	0.004	0.09	8:27AM		Woods (oaks) bare
	4	6.383	1	7:00AM	183		1.91	2.24	1.87	63-71	49-63	7:45AM	2:00PM	0.395	4.50	8:24AM		Rye and oats; bad stand
	5	1.726	3				1.89	3.00		63-71	49-63	7:45AM	9:55AM	0.376	1.50	8:25AM		Rye and oats 1-2"

\*See next run





PROJECT SC9 Experiment Station, Tyler, Texas

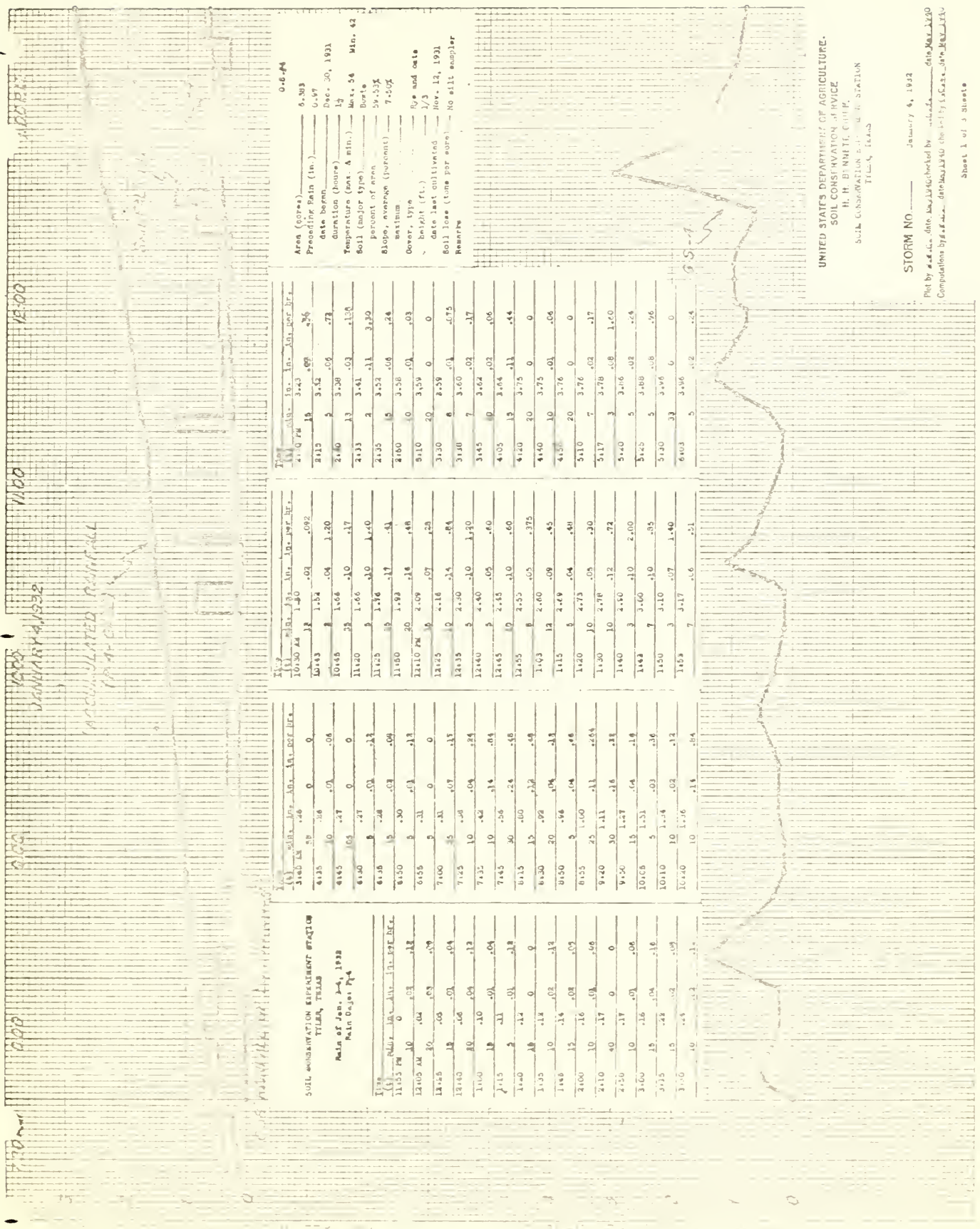
# RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

SHEET 6 OF 6 SHEETS

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10/2/20

ACCUMULATED RAINFALL & RUNOFF IN INCHES



SOIL CONSERVATION EXPERIMENT STATION  
TILLAMOOK, OREGON  
Rain of Jan. 2-4, 1932  
Rain Gauge No. 4

Time	10:30 AM	11:00 AM	11:30 AM	12:00 PM	12:30 PM	1:00 PM	1:30 PM	2:00 PM	2:30 PM	3:00 PM	3:30 PM	4:00 PM	4:30 PM	5:00 PM	5:30 PM	6:00 PM	6:30 PM	7:00 PM	7:30 PM	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM
Rain (in.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Runoff (in.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Time	10:30 AM	11:00 AM	11:30 AM	12:00 PM	12:30 PM	1:00 PM	1:30 PM	2:00 PM	2:30 PM	3:00 PM	3:30 PM	4:00 PM	4:30 PM	5:00 PM	5:30 PM	6:00 PM	6:30 PM	7:00 PM	7:30 PM	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM
Rain (in.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Runoff (in.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Area (acres)	6.203
Preceding Rain (in.)	0.47
Date begun	Dec. 20, 1931
Duration (hours)	13
Temperature (max. & min.)	Max. 54 Min. 42
Soil (major type)	Doyle
Percent of area	52-55%
Slope, average (percent)	7-50%
Soil, type	Doyle
Soil, last cultivated	Nov. 13, 1931
Soil loss (ton per acre)	No soil sampler
Remarks	

UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE  
H. H. BENNETT, CHIEF

SOIL CONSERVATION SERVICE, TILLAMOOK STATION  
TILLAMOOK, OREGON

STORM NO. \_\_\_\_\_ January 4, 1932

Plot by \_\_\_\_\_ date \_\_\_\_\_  
Computations by \_\_\_\_\_ date \_\_\_\_\_

100-5000



2000 300 400 500 600 700 800

JANUARY 4, 1932

ACCUMULATED RAINFALL  
(P. 4-676E)

W. FALL INTENSIFY

SOIL CONSERVATION EXPERIMENT STATION TULSA, OKLA.									
Rain of Jan. 4, 1932 Rain Gauge E-4									
Time	Min.	In.	In./hr	Time	Min.	In.	In./hr		
6:00 P.	67	3.98	0	8:24 P.	6	4.55	.25	In.	In/hr
7:15	25	3.98	.02	9:20	3	4.70	.09	1.60	
8:10	7	4.02	.02	10:00	10	4.78	.41	2.46	
9:15	23	4.04	.02	10:50	7	5.19	.05	.43	
10:15	5	4.26	.22	11:10	30	5.24	.08	.26	
11:21	6	4.40	.14	12:15 A.	10	5.32	.04	.24	
	3		.15	1:05	30	5.36	.12	.24	
					20	5.48	.04	.12	
					50	5.52	0	0	
					30	5.52	.15	.30	
					55	5.67	0	0	
					20	5.67	.01	.03	
					10	5.68	.02	.12	
					105	5.70			

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BINNIE, CHIEF  
SOIL CONSERVATION EXPERIMENT STATION  
TULSA, OKLA.

STORM NO. \_\_\_\_\_ January 4, 1932  
Plot by K. L. C. 4/10/32, checked by C. L. C. 4/10/32  
Competition by K. L. C. 4/10/32, checked by C. L. C. 4/10/32  
Sheet 2 of 2 Sheets



8:00 P.M. 9:00 10:00 11:00 12:00 1:00 2:00 A.M.

JANUARY 4, 1932

JANUARY 5, 1932

ACCUMULATED RAINFALL 5.70"  
(P-4-GAGE)



RAINFALL INTENSITY

8.5.4  
2.2 - A1 - 8.2.2  
1.5 - B 26  
1.0 - B 20  
1.0 - B 32  
1.0 - B 17  
1.4 - B 40  
1.0 - B 43  
1.31 - B 5  
5.70 - 1.37

6.5.4 - 7.0.3.4  
JANUARY 5

6.5.4

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. J. HUNTER, JR.  
SPECIAL AGENT IN CHARGE  
TULSA, OKLA.

STORM NO. 1000 - January 4, 1932  
Plot by S. S. L. on 5-11-32 checked by S. S. L. on 5-11-32  
Computation by S. S. L. on 5-11-32 checked by S. S. L. on 5-11-32  
Sheet 3 of 3 Data









1000 PM 400 500 600 700 PM 400 AM  
JANUARY 11, 1932 JANUARY 12, 1932

ACCUMULATED RAINFALL 2.02"  
(P. 4. GAGE.)

RAINFALL INTENSITY G.S. 4-0.538"

SOIL CONSERVATION EXPERIMENT STATION  
TULSA, TEXAS

Rain of Jan. 12, 1932  
Rain Gage, P-4

Time	Rate	Sec.	Min.	Sec.	Min.	Sec.	Min.
3:40 AM	40	200	40	00			
3:50	25	200	40	02			
4:15				4.64			

G.S. 4-0.538"  
JANUARY 11, 1932

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. M. BENNETT, CHIEF  
SOIL CONSERVATION EXPERIMENT STATION  
TULSA, TEXAS

STORM NO. January 11, 1932

Fig. by H.M.B. date 5-50 checked by Q.C.M. date 5-50  
Computation by H.M.C. date 5-50 checked by Q.C.M. date 5-50

Sheet 2 of 2 sheets





2,00A W

DS-A-0025<sup>u</sup>

[illegible] $G.S. + \text{and}$ 

Return of Feb. 15, 1932  
 June 1934 Field C

[illegible]

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040

This image shows a blank, aged, cream-colored page, likely an endpaper or flyleaf of a book. The paper has a slightly textured appearance with some minor discoloration and a small dark stain near the top center. The left edge of the page shows the binding structure, including what appears to be a metal clip or staple used for holding the page in place. The overall tone is warm and slightly yellowed, characteristic of old paper.



ROCK OFF IN CUBIC FEET PER SECOND

SA. 500 1000

207

七

100

1777  
1778

## TYLER, TEXAS

Return of Feb. 18, 1932  
Huntin Gage, Field C

[illegible]

Q. 21. A

Area (m <sup>2</sup> )	0.409		
Date on m.	Feb. 16, 1932		
Duration (hours)	34		
Temperature (m.a. & m.)	Max. 49		
Wind (major type)	Breeze		
Percent of sun	54.2%		
Winds, speed & dir.	7.5%		
Clouds			
Cover, type	Open & dense		
Height (ft.)	1.3		
Date last cultivated	Nov. 10, 1931		
Boil time (time of day)	Do not sample		
Notes			

5  
+  
5  
5

5.5.2.

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UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BLANCHET, CHIEF.

SOIL CONSERVATION SERVICE STATION  
FIELD, TRANS

STORM NO.

January 10, 1932

Plot by ANCO data May 1960 checked by ANCO data May 1960  
Computations by ANCO data May 1960 checked by ANCO data May 1960

Street 1111 51.100





5:10 PM 4:00

5:00

6:00

7:00

11:00 AM

12:00

1:00 PM

1:00 PM

FEBRUARY 18, 1932

FEBRUARY 1932

ALCUM LATED 2000 4.190"

11:30 AM

100% ALL INTENSITY

6:30 PM

Time	min	sec	in.	ft.	in.	per hr.
5:10 PM	17	1.10	.07	.02		
5:37	13	1.13	.03	.16		
6:06	29	1.13	0	0		
6:16	10	1.13	.01	.06		
6:16	25	1.14	.01	.024		
6:41	15	1.15	.02	.04		
6:56	30	1.17	.01	.03		
5:16	40	1.18	.05	.15		
5:16	10	1.23	.02	.12		
5:46	25	1.25	.08	.14		
6:21	30	1.25	.06	.04		
6:51	45	1.25	.01	.013		
7:16	20	1.26	.02	.06		
7:56	3	1.28	.01	.02		
7:59	27	1.29	.01	.022		
8:26	45	1.40	.01	.013		
9:11	5	1.41	.1	.12		
9:16	30	1.42	.01	.02		
9:46	60	1.43	0	0		
11:16	9	1.43	.02	.13		
11:45	9	1.45	.01	.07		
11:54	12	1.49	.04	.0		
11:56	10	1.53	.06	.16		
11:56	20	1.59	0	0		

6:54 00 AM 8:00 PM

6:54 00 AM 11:45 AM

SOIL CONDUCTIVITY MEASUREMENT

Moist of Feb. 19, 1932  
Main water 7:00 C

Time	min	sec	in.	ft.	in.	per hr.
12:16 AM	5	1.00	.01	.13		
12:11	23	1.01	.11	.25		
12:14	12	1.01	.01	.02		
12:46	130	1.02	0	0		
2:16	27	1.03	.1	.022		
3:16	15	1.07	.1	.074		
4:16	150	1.07	0	0		
5:16	20	1.08	.02	.064		
6:16	30	1.11	.02	.04		
7:16	70	1.13	.02	.017		
8:16	20	1.14	.1	.03		
9:16	45	1.14	0	0		
10:11	15	1.15	.01	.04		
10:16	75	1.15	0	0		
11:11	105	1.15	.02	.13		
11:26	40	1.17	.03	.03		
2:16 AM	1.00					

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. WHITE, C. E.  
SOIL CONSERVATION SERVICE STATION  
TULSA, OKLA.

STORM NO. — February 18, 1932

Plot No. 1000, dated 1940 checked by J. C. J. 4/10/45  
Compiled by J. C. J. 10/10/45 (10/10/45) 4/10/45

Sheet 2 of 2



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

OS-4-607 SEP 11 1964

SOIL CO. OBSERVATION REPORTING STATION  
Tulsa, T. 46B  
Rain of March 5, 1932  
Main Unger Field C

$T_{\text{obs}}$	$\langle \dot{\gamma} \rangle$	$\langle \dot{\gamma} \rangle^{\text{calc}}$	$\beta_0$	$\beta_{\text{exp}}$	$\beta_{\text{calc}}$	$\beta_{\text{exp}}/\beta_{\text{calc}}$
1.620 Å	1.66	1.66	0.5	0.26		
1.2035	15	1.42	0.7	0.26		
1.2150	5	1.19	0.7	0.24		
1.4355	25	1.42	0.3	0.12		
1.460	7	1.44	0.1	0.09		
2.000	33	1.42	0.26	0.26		
2.110	10	1.48	0.1	0.04		

Area (acres)	3.4
Preceding main (in.)	1.4
date begun	1948
duration (years)	2
Temperature (max)	104.14
Boil (min per ton)	1.25
percent of water	5.5
Slips, stored per mol	1
moisture	1
Cooper, type	1
Boil (in. ft.)	5
date of collection	1948
Boil 1.44 (time per acre)	1
Boil 1.44 (time per acre)	1

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE

H. H. DENNETT, CHIEF,

SOIL CONSERVATION AND EROSION STATION  
TULSA, OKLAHOMA

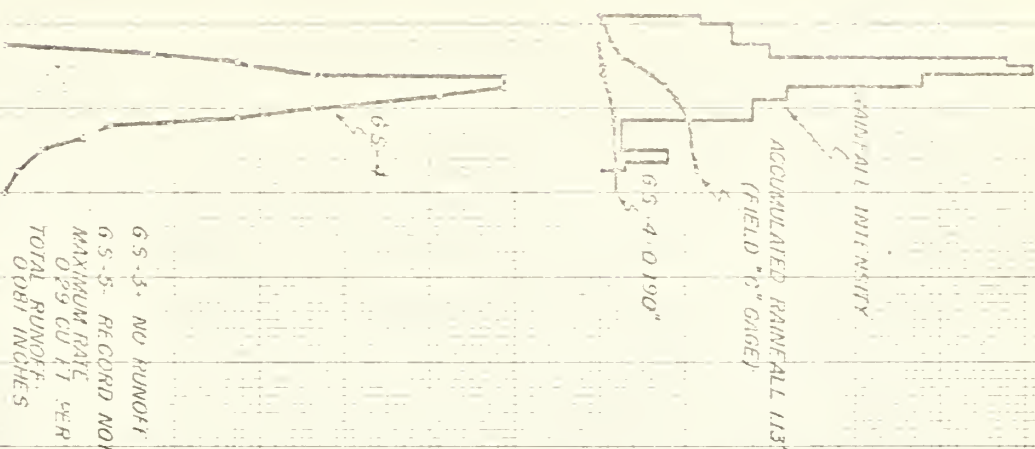
STORIN NO. \_\_\_\_\_  
March 4, 1932

Plot by Hand-drawn checked by Self dim Nov 1969  
 Computations by Electronic data Self checked by Hand-drawn dim 30





ACCUMULATED PLANT &amp; EQUIPMENT IN '00-ES



65-3 NO RUNOFF  
65-5 RECORD NOT CLEAR  
MAXIMUM RATE  
0.25 CU YD PER SEC AT 305 PM  
TOTAL RUNOFF  
0.01 INCHES

[illegible]

Area (acres).....	6.50-7.5	5.5-6.4	6.50-8.0
Perennial Rain (in.).....	7.5-8.6	6.8-7.5	7.7-8.6
Date born.....	July 40	July 40	July 40
Duration (hours).....	July 40	July 40	July 40
Temperature (max. & min.).....	84°-95°	84°-90°	84°-90°
Soil (major type).....	Alvay	Alvay	Boada
Percent of area.....	100%	100%	100%
Slope, average (percent).....	7-10%	1-10%	5-10%
Latitude.....	23°-24°	23°-24°	23°-24°
Altitude.....	above	above	Strip cropland
Veget. type.....	above	above	Citrus grove
Height (ft.).....	above	above	Citrus grove
Date last cultivated.....	above	above	above
Soil type (one per acre).....	above	above	above
Remarks.....	above	above	above

UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CON., ILLIATION SERVICE

[illegible]

STORM NO.

Vol. 2, 1992

Plot by            date            checked by                                   
 Computations by                                  by



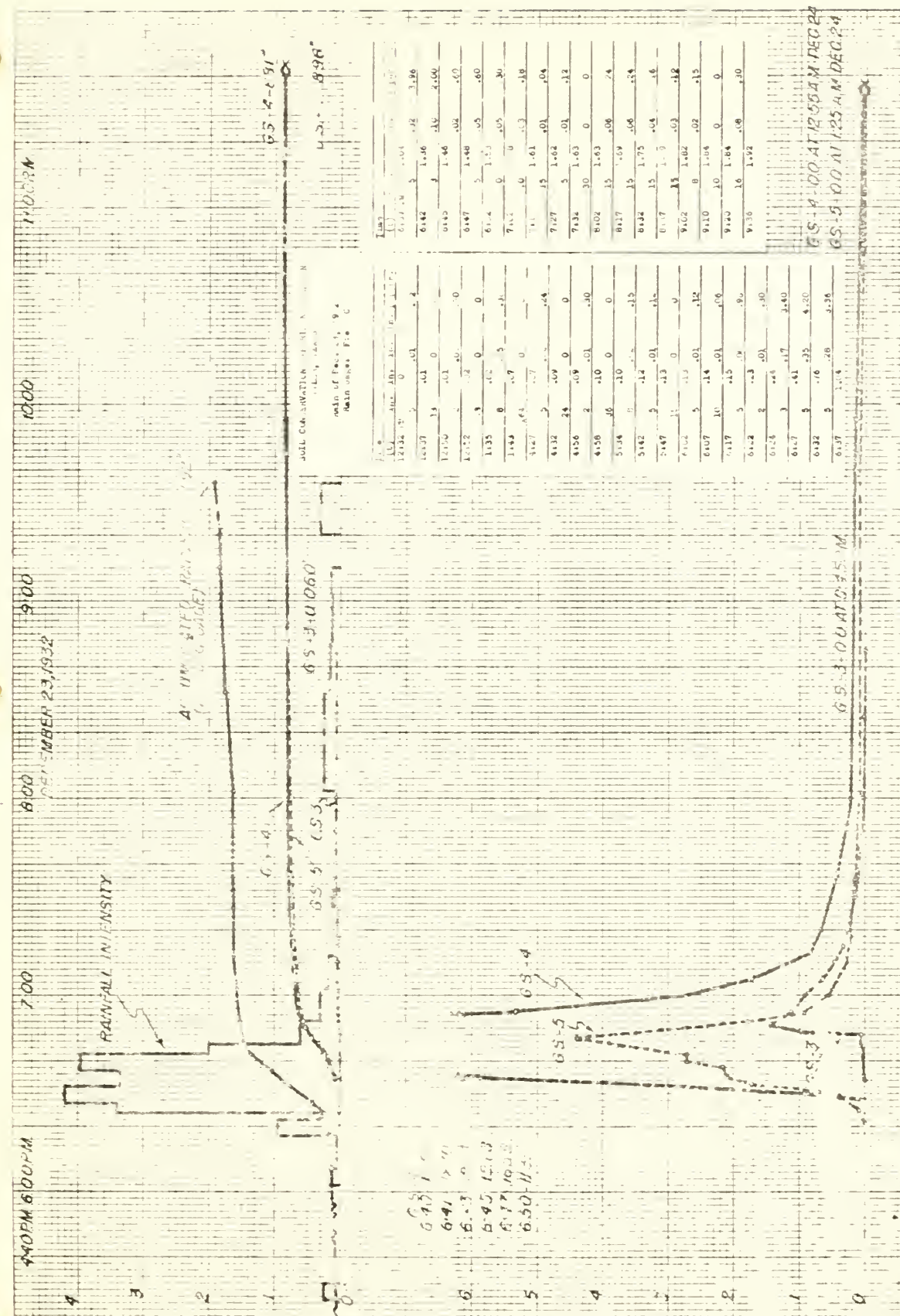






ACCUMULATED RAINFALL & RUNOFF IN INCHES.  
54. FALL INTENSITY IN INCHES PER HOUR.

TIME IN 0.50 FEET PER SECOND



UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BLISS, JR., CHIEF

BOUL CONRA Y TUN RI JENN, STATION  
1144 TIAS

STORM NO

December 23, 1934

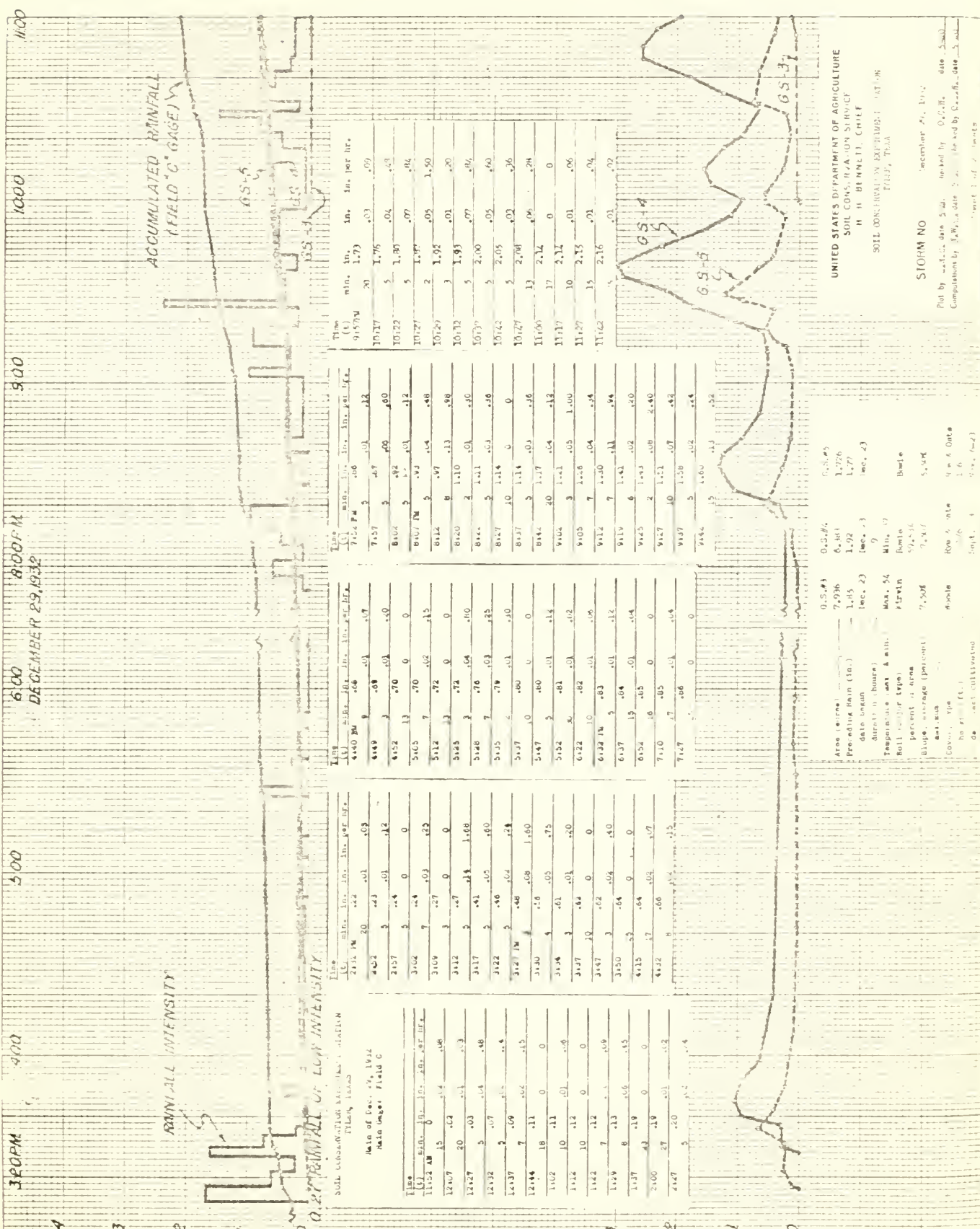
Flot by W.F.C. d'atoday 1940che . . . d by O.G.A.d.a . . . -ate May 1940  
computations by W.F.C. u . . . May 1, du loked by O.G.A.d. de's May 1940

Sheet 1 of 5 sheets



ACCUMULATED RAINFALL & RUNOFF IN INCHES

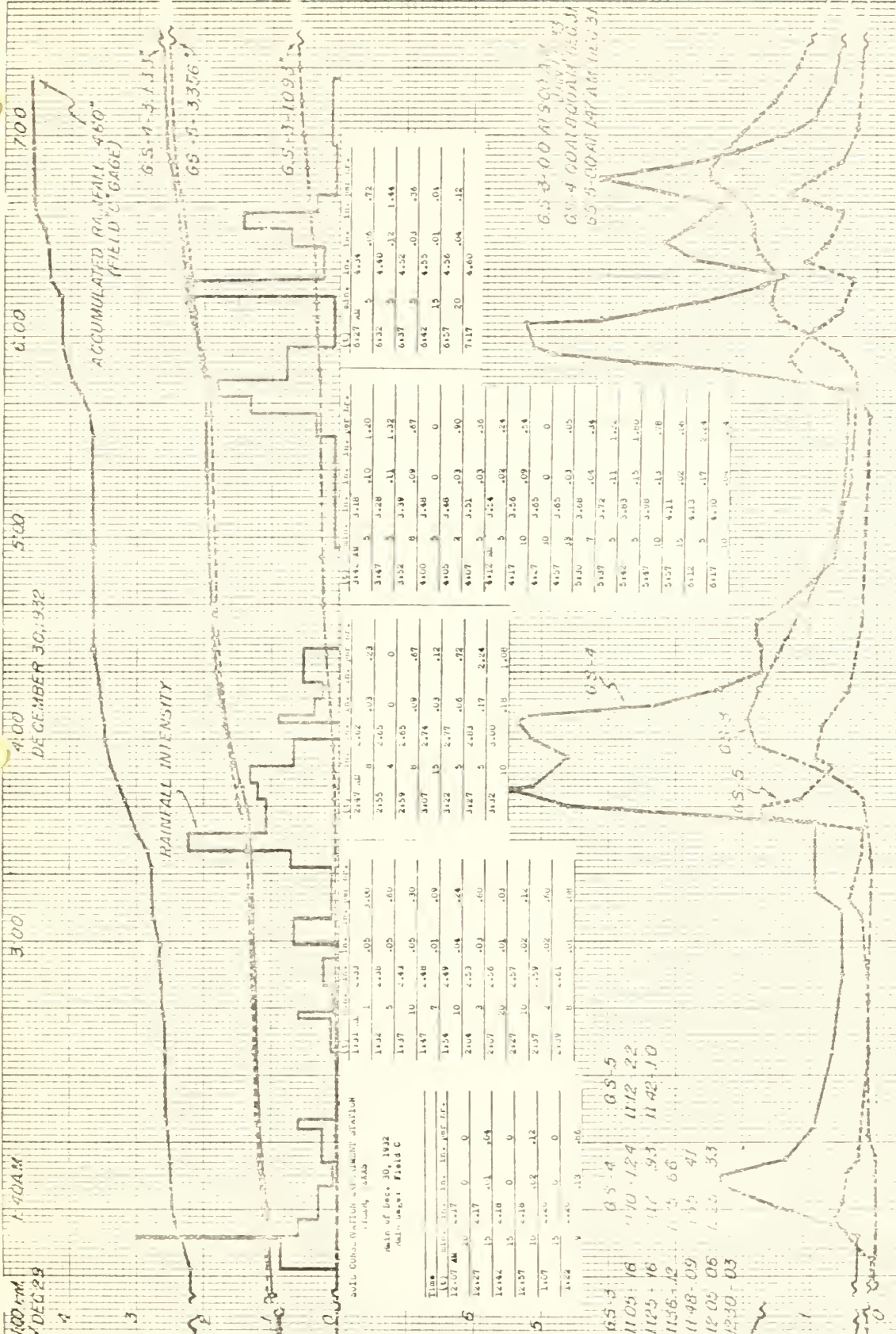
RUNOFF IN CUBIC FEET PER SECOND







ACCUMULATED RAINFALL & RUNOFF IN INCHES  
RAINFALL INTENSITY IN INCHES PER HOUR



UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. W. BARNETT, CHIEF  
NATIONAL STATION EXPERIMENT STATION  
TEMP, TEXAS

STORM NO. December 29, 1932  
Plot by H. W. Barnett, checked by C. C. Barnett, date 2-2-33  
Computations by H. W. Barnett, checked by C. C. Barnett, date 2-2-33

Sheet 2 of 2 sheets

173

1933



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH Jan. & Feb., 19 33  
 SHEET 1 OF 8 NINETEEN

 PROJECT 363 Experiment Station, Tyler, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

Date	Watershed		Rainfall					Temperature (degrees F)			Run-off				Rainfall Missed (inches)	Run Loss (tons per acre)	Condition of Watershed	
	Number	Area (acres)	Gage No.	Hours (local)	Duration (minutes)	Amount (inches)	Maximum Intensity			Maximum	Minimum	Hours (local)	Amount (inches)	Maximum Rate				
							8 minutes (inches per hour)	15 minutes (inches per hour)	30 minutes (inches per hour)					Cu ft. sec				Time
1933	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	
Jan. 7-8-9	3	7.936	2-F-FB			2.96				61-47	46-46	1-7-33	0.098		1-8-33	2.862	0.000	woods (oaks) bare
	4	5.747	7-P-4	12:25AM	1970	2.64	1.05	0.64	0.50	61-47	46-46	1-7-33	0.742		1-9-33	1.898	0.467	Rye 2", oats 2", bad stand
	5	1.726	3-F-A			2.41				61-47	46-46	1-7-33	1.982		1-7-33	0.428	1.010	Rye 2", oats 2"
Jan. 16	3	7.936	2-F-FB			0.27				63	55	NRO						woods, bare
	4	5.747	7-P-4	3:00PM	500	0.27	0.72	0.32	0.22	63	55	NRO						Oats 3", poor stand; rye 3"
	5	1.726	3-F-A							63	55	NRO						Rye 3", oats 3"
Jan. 21	3	7.936	2			1.22				72	62	NRO						woods, bare
	4	5.747	1	2:20AM	580	1.19	2.28	1.24	0.90	72	62	2:55AM	0.350		3:40AM	0.840	0.453	Oats 3", poor stand, rye 3"
	5	1.726	3			1.19				72	62	2:36AM	0.540		3:33AM	0.650	0.966	Rye; Oats
Jan. 29	3	7.936	2			0.29				48	42	NRO						woods, bare
	4	5.747	7-P-4	5:10PM	360	0.29	0.24	0.12	0.08	48	42	NRO						Oats 3", poor stand; rye 3"
	5	1.726	3							48	42	NRO						Rye 3", oats 3"
Jan. 31	3	7.936	2			0.86				59	51	NRO						woods, bare
	4	5.747	7-P-4	1:54PM	226	0.77	0.96	0.70	0.50	59	51	2:08PM	0.219		3:58PM	0.551	0.143	Oats, poor stand, rye
	5	1.726	3			0.50				59	51	3:29PM	0.167		3:53PM	0.633	0.106	Rye, oats
Feb. 6-7	3	7.936	2			0.46				54-60	46-14	NRO						woods, bare
	4	5.747	1	7:30AM	1237	0.37	1.44	0.68	0.50	54-60	46-14	3:15AM	0.061		4:15AM	0.109	0.046	Oats, poor stand, rye
	5	1.726	3			0.42				54-60	46-14	3:26AM	0.093		3:26AM	0.327	0.059	Rye, oats
Feb. 10	3	7.936	2			0.17				30	26	NRO						woods, bare
	4	5.747	1				Ice			30	26	NRO						Oats, poor stand, rye
	5	1.726	3							30	26	NRO						Rye, oats
Feb. 13-14	3	7.936	2			0.47				60-71	47-10	NRO						woods, bare
	4	5.747	7-P-4		1710	0.37	0.60	0.36	0.22	60-71	47-10	NRO						Oats 5", poor stand, rye 5"
	5	1.726	3			0.40				60-71	47-10	Silt box	0.115	No data		0.285	0.649	Rye 5", oats 5"





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH Feb. Mar. & Apr. 1933  
 SHEET 2 OF 8

 PROJECT SCS Experiment Station, Tyler, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

Date	Watershed		Rainfall						Transpiration (Graham P.)			Run-off				Rainfall minus Evapor (inches)	Rye Loss (tons per acre)	Contents of Watershed
	Number	Area (acres)	Obs. No.	Time (hours)	Direction (miles)	Amount (inches)	Maximum Intensity			Maximum	Minimum	Ruled (hours)	Amount (inches)	Maximum Rate				
							4 minutes (inches per hour)	10 minutes (inches per hour)	30 minutes (inches per hour)					Cu. ft. per Time				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	
Feb. 25-26	3	7.936	2-F-YB							74-56	56-45						Woods (oaks) bare Oats 6"; poor stand; Rye 6" Oats 6"; Rye 6"	
	4	5.747	1-F-C	11:25AM	495	0.10	0.08	0.06		74-56	56-45	NRO						
	5	1.726	3-F-A							74-56	56-45							
Feb. 26-27	3	7.936	2			1.00				56-47	45-42	NRO					Woods, bare Oats 6"; poor stand; Rye 6" Oats 6"; Rye 6"	
	4	5.747	1	5:00PM	1605	0.73	0.48	0.32	0.26	56-47	45-42	NRO						
	5	1.726	3			0.89				56-47	45-42	Silt box	0.062	No rate	0.828	0.000		
March 5	3	7.936	2			1.22				61	51	NRO					Woods, bare Oats 6"; poor stand; Rye 6" Oats 6"; Rye 6"	
	4	5.747	1	2:45PM	382	1.00	0.96	0.80	0.62	61	51	4:00PM 2 mi. d.	0.240	0.290	0.760	0.054		
	5	1.726	3			1.02				61	51	Silt box	0.146	No rate	0.874	0.042		
March 18	3	7.936	2			0.76				73	59	NRO					Woods, bare Oats 7"; poor stand; Rye 7" Oats 7"; Rye 7"	
	4	5.747	1	12:50PM	145	0.77	2.40	1.20	0.78	73	59	12:52PM 7:55PM Silt box	0.220	1.57	12:55PM	0.550		
	5	1.726	3			0.79				73	59	Silt box	0.080	No rate	0.71	0.099		
March 24	3	7.936	2			1.04				68	56	NRO					Woods, beginning to leaf Oats 8"; poor stand; Rye 8" Rye, Oats turned under Mar. 20-21	
	4	5.747	1	12:09PM	825	0.98	2.23	1.80	0.94	68	56	3:35PM 4:21PM 10:49PM 1:00AM	0.276	7.03	11:00PM	0.704		
	5	1.826	3			0.97				68	56	Silt box	0.091	No rate	0.879	0.313		
March 26	3	7.936	2							63	48						Woods, in leaf Oats 8"; poor stand Rye 8" Diked	
	4	5.747	1	3:25PM	203	0.26	0.72	0.32	0.28	63	48	NRO						
	5	1.726	3							63	48							
March 27	3	7.936	2			0.37				69	51	NRO					Woods, in leaf Oats 8"; poor stand, Rye 8" Rudieked	
	4	5.747	1	4:15AM	275	0.12	0.24	0.12	0.08	69	51	NRO						
	5	1.726	3			0.43				69	51	NRO						
March 30-31	3	7.936	2			1.76				72	60	2:50PM 12:40AM	0.068	1.15	3:19PM	1.692	Woods, in leaf Oats 8"; poor stand, Rye 8" Bare, loose	
	4	5.747	1	2:02AM	943	1.75	6.00	2.28	1.36	72	60	2:10PM 1:57PM 2:11PM 5:41PM	1.147	25.83	3:02PM	0.603		
	5	1.726	3			1.79				72	60	2:17AM 3:58AM	0.607	0.12	2:20AM	1.183		
April 10	3	7.936	2			0.19				83	65	NRO					Woods, in leaf Plowed 3rd to 8th corn emerging 2" control strip bare	
	4	5.747	1	4:17PM	218	0.21	1.20	0.48	0.24	83	65	NRO						
	5	1.726	3			0.26				83	65	NRO						

• See next rain





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 PROJECT 663 Experiment Station, Tyler, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS
Month Apr. & May, 1933Sheet 3 OF 8 PAGES

Date	Watershed		Rainfall						Temperature (degree F)			Runoff			Rainfall minus surface (inches)	Run Loss (tons per acre)	Condition of Watershed	
	Number	Area (acres)	Stage No.	Begin (hour)	Duration (minutes)	Amount (inches)	Maximum Intensity			Minimum	Begin (hour)	End (hour)	Amount (inches)	Maximum Rate				
1933	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
April 13	3	7.936	2-F-Fb				*				65	47						woods, in leaf
	4	5.747	1-F-C	2:27PM	160	0.51		2.04	1.06	0.52	65	47	HRD					Disked; soil loose April 11-12
	5	1.726	3-F-A				*				65	47						Corn, sudan grass & cow peas on control strip
April 14	3	7.936	2				1.10				60	40	HRD					woods, in leaf
	4	5.747	1	5:37AM	335		0.37	0.36	0.24	0.14	60	40	HRD					Bare, loose
	5	1.726	3				0.86				60	40	Silt box	0.020	No rate	0.840		Corn, sudan grass & cow peas not up
April 20	3	7.936	2				0.52				79	62	HRD					woods, in leaf
	4	5.747	1	12:20PM	115	0.59	0.57	1.92	1.40	0.90	79	62	HRD					Bare, loose
	5	1.726	3				0.67				79	62	12:44AM 4:05PM	0.136	1.37	12:53PM	0.264	Corn 8"; sudan grass & cow peas 1", cultivated April 15-18
April 25	3	7.936	2				0.57				76	59	HRD					woods
	4	5.747	1	3:21AM	342		0.52	2.16	0.96	0.50	76	59	HRD					Bare, loose
	5	1.726	3				0.55				76	59	Silt box	0.045	No rate	0.505		Corn 8"; sudan grass & cow peas on control strips 1, 2
April 25-26	3	7.936	2				1.20				76-83	59-59	HRD					woods
	4	5.747	1	8:53PM	257		0.95	3.12	1.84	1.04	76-83	59-59	10:19PM 4:10AM	0.209	0.93	12:59PM	0.661	*disked
	5	1.726	3				0.89				76-83	59-59	9:50AM 3:02AM	0.199	0.37	10:12PM	0.681	Corn 8"; sudan grass & cow peas 2"
April 29	3	7.936	2				0.83				80	67	HRD					woods
	4	5.747	1	11:00AM	245		0.76	2.40	0.96	0.64	80	67	11:50AM 5:15PM	0.066	0.77	3:15PM	0.674	Bare, loose
	5	1.726	3				0.90				80	67	11:38AM 12:53PM		0.41	11:48PM		
May 4													2:57PM 4:40PM	0.196	1.07	3:11PM	0.704	Corn; sudan grass & cow peas
	3	7.936	2				1.01				71	57	HRD					woods
	4	5.747	1	10:17AM	590		0.93	2.28	1.72	1.18	71	57	12:48PM 4:53PM	0.231	2.48	12:58PM	0.699	Replanted May 1-3
May 4	5	1.726	3				0.56				71	57	12:16PM 1:50PM	0.169	0.93	12:50PM	0.771	Corn 12"; sudan grass & cow peas Cultivated May 1-3; 3"
							*											woods
							0.23	1.80	0.64	0.38	84	67	HRD					Cotton planted May 13th
May 14	3	7.936	2								84	67						Corn 15" tinned, cultivated May 8-13
	4	5.747	1	2:46PM	104		0.23				84	67						
	5	1.726	3				*				84	67						
May 15	3	7.936	2				0.48				75	60	HRD					woods
	4	5.747	1	2:52AM	23		0.17	1.44	0.52	0.34	75	60	HRD					Loose, bare
	5	1.726	3				0.52				75	60	HRD					Corn, sudan grass & cow peas

\*See next rain

 Woods, in leaf  
 Disked, soil loose April 11-12  
 Corn, sudan grass & cow peas  
 on control strip

 Woods, in leaf  
 Bare, loose  
 Corn, sudan grass & cow peas  
 not up

 Woods, in leaf  
 Bare, loose  
 Corn 6"; sudan grass & cow peas  
 1", cultivated April 15-18

 Woods  
 Bare, loose  
 Corn 6"; sudan grass & cow peas  
 on control strips 1, 2"

 Woods  
 \*disked  
 Corn 6"; sudan grass & cow peas  
 2"

 Woods  
 Bare, loose  
 Corn, sudan grass & cow peas

 Woods  
 Replanted May 1-3  
 Corn 12"; sudan grass & cow peas  
 Cultivated May 1-31, 3"

 Woods  
 Cotton planted 8th-13th  
 Corn 15" tilled, cultivated  
 May 6-13

 Woods  
 Loose, bare  
 Corn, sudan grass & cow peas



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 Month May & July, 1933

 SHEET 4 OF 8 FIFTEEN

## RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

PROJECT SCS Experiment Station, Tyler, Texas

Date	Watershed		Rainfall				Temperature (degrees F.)		Run-off			Rainfall Meters (inches)	Run Loss (cwt per acre)	Comments or Watershed
	Number	Area (acres)	Obs. No.	Duration (minutes)	Amount (inches)	8 minutes (inches per hour)	15 minutes (inches per hour)	30 minutes (inches per hour)	Amount (inches)	Rate (cwt per acre)	Time			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1933 May 21	3	7.936	2-F-1b			0.64				86	NRQ			Woods
	4	5.747	1-F-C	11:25AM	95	0.52		1.06		86	NRQ			Cotton not up, soil loose
	5	1.726	3-F-A			0.54				86	NRQ			Corn; sudan grass & cow peas - 6"
May 24-25	3	7.936	2			2.55				84-68	5-24 5-24 3:48PM 6:53PM 5-25 5-25 4:40AM 6:53AM	0.22 4:17PM 0.01 4:41AM		
May 24-25	4	5.747	1	1:46PM	1527	2.60	4.68	1.58		84-68	5-24 5-24 1:51PM 2:35PM 5-24 5-24 3:33PM 4:37PM 5-25 5-25 4:37AM 8:30AM	9.94 1:57PM 6.22 3:55PM 2.99 4:43AM	0.014	Woods
May 24-25	5	1.726	3			2.78				84-68	5-24 5-24 1:54PM 2:54PM 5-24 5-24 3:37PM 5:04PM 5-25 5-25 4:45AM 5:59AM	1.05 2:40PM 1.57 4:02PM 0.56 4:51AM	0.629	Cotton not up, soil loose
May 29	3	7.936	2			0.13				84	NRQ			Corn 20" + sudan grass & cow peas 6" on control strip
	4	5.747	1	3:25AM	92	0.16	0.72	0.24		84	NRQ			Woods
	5	1.726	3			0.10				84	NRQ			Some cotton up, soil loose
July 4	3	7.936	2			0.10				101	NRQ			Corn 30" + sudan grass & cow peas
	4	5.747	1	5:50AM	15	0.11	1.08	0.22		101	NRQ			Woods
	5	1.726	3			0.10				101	NRQ			Cotton 6" to 14"; cultivated 30t. Corn 5'; sudan grass & cow peas Cult'd in June 16" high
July 15-16	3	7.936	2			0.80				94-89	7:5-72			Woods (oaks) in leaf
	4	5.747	7-F-4	6:00PM	785	0.78	2.04	1.16		94-89	7:5-72			Cotton cultivated 14th-17th
	5	1.726	3			0.86				94-89	7:5-72			Corn 66"; sudan grass & cow peas 20" on control strip
July 19	3	7.936	2			3.12				88	7:10AM 8:39AM	1.27 7:53AM		Woods in leaf
	4	5.747	1	6:22AM	448	3.25	3.84	2.96		88	7:10AM 7:50AM	8.38 7:33AM		Cotton recently cultivated,
	5	1.726	1			1.53				88	6:40AM 8:32AM 8:52AM 10:47AM	3.26 7:44AM 0.08 9:02AM	0.718	Corn 5'-4", sudan grass & cow peas 22"





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH Jul. & Aug., 19 33  
 SHEET 5 OF 8 SHEETS

 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS  
 PROJECT-6CS Experiment Station, Tyler, Texas

Date	WATERSHED			RAINFALL					TEMPERATURE (Degrees F)		RUN-OFF			Harvestal Miles (Acres)	Rice Loss (tons per acre)	Condition of Watershed
	Number	Area (acres)	Stage No.	Begin (hour)	Duration (minutes)	Amount (inches)	6 minutes (inches per hour)	15 minutes (inches per hour)	30 minutes (inches per hour)	Maximum	Minimum	Time (hour)	Yielded (bushels)	Amount (inches)	Cl. ft. sec.	Time
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
July 23-24	3	7.936	2-F-E							80-82	74-69	NRO				Woods, in leaf
	4	5.747	1-F-C	2:20AM	3245	0.77	0.44	0.36		80-82	74-69	NRO				Cotton 10"-24"
	5	1.726	3-F-A			0.80				80-82	74-69	NRO				Corn; sudan grass & cow peas
July 26	3	7.936	2			0.11				84	69	NRO				Woods, in leaf
	4	5.747	1	7:25PM	155	0.11	0.60	0.20		84	69	NRO				Cotton 10"-24"
	5	1.726	3			0.15				84	69	NRO				Corn; sudan grass & cow peas
July 29	3	7.936	2			0.31				81	69	NRO				Woods, in leaf
	4	5.747	1	10:57AM	508	0.29	1.68	0.64	0.32	81	69	NRO				Cotton 10"-24"
	5	1.726	3			0.29				81	69	NRO				Corn; sudan grass & cow peas
Aug. 6	3	7.936	2				2.40	2.00	1.40	93	75	NRO				Woods, in leaf
	4	5.747	1	3:45PM	40	0.75				93	75	NRO				Cotton 18"-30"
	5	1.726	3							93	75	NRO				Corn; sudan grass & cow peas
Aug. 7	3	7.936	2			0.99				92	77	NRO				Woods, in leaf
	4	5.747	1	7:23AM	65	0.17	0.72	0.44	0.28	92	77	NRO				Cotton 18"-30"
	5	1.726	3			0.84				92	77	NRO				Corn; sudan grass & cow peas
Aug. 12	3	7.936	2			1.20				92	72	NRO				Woods, in leaf
	4	5.747	1	6:45AM	130	1.26	3.60	2.60	1.58	92	72	7:16AM 10:12AM	0.166	2.48	7:25AM	Cotton 18"-30"
	5	1.726	3			1.25				92	72	Silt box	0.053	No rate		Corn; sudan grass & cow peas
Aug. 13	3	7.936	2			0.36				89	70	NRO				Woods, in leaf
	4	5.747	1	4:53PM	567	0.36	0.84	0.36	0.22	89	70	NRO				Cotton 18"-30"
	5	1.726	3			0.34				89	70	NRO				Corn; sudan grass & cow peas
Aug. 17	3	7.936	2			0.80				91	70	NRO				Woods, in leaf
	4	5.747	1	3:00PM	123	0.79	2.64	1.24	0.66	91	70	3:25PM 7:55PM	0.170	1.57	3:26PM	Cotton 24"-30"
	5	1.726	3			0.81				91	70	Silt box	0.052	No rate		Corn 5'-4"; sudan grass & cow peas
Aug. 25	3	7.936	2			1.11				92	70	NRO				turned under
	4	5.747	1	4:34PM	105	1.24	3.78	2.80	2.22	92	70	4:38PM 5:12PM	0.342	6.44	4:42PM	Cotton 24"-30"
	5	1.726	3			1.36				92	70	4:39PM 5:13PM	0.253	1.05	4:50PM	Corn mature;

\* Rain of Aug. 6 &amp; 7 shown as one rain





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 Month Aug. Sept. & Oct., 19 33  
 Sheet 6 of 8 RUNOFFS

## RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

Project 508 Experiment Station, Tyler, Texas

Date	WATERSHED			RAINFALL				TEMPERATURES (degree F)			RUN-OFF				RAINFALL MINUS RUN-OFF (inches)	Run Loss (tons per acre)	Comments or Watershed
	Number	Area (acres)	Clear No	Hours (local)	Duration (minutes)	Amount (inches)	MAXIMUM INTENSITY			Hours (local)	Rolls (boxes)	Amount (inches)	MAXIMUM RATE				
							4 minutes (inches per hour)	16 minutes (inches per hour)	30 minutes (inches per hour)				Cu Ft. sec.	Time			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1933																	
Aug. 29	3	7.936	2-F-7B			0.37				88	73						
	4	5.747	1-F-C	5:12:30AM	127	0.40	1.80	0.88	0.46	88	73	0.014	No rate			0.061	Woods, in leaf Cotton 24"-30" Corn harvested
	5	1.726	3-F-A			0.47				88	73						
Aug. 31	3	7.936	2			0.30				89	72						
	4	5.747	1	6:43PM	140	0.28	0.96	0.68	0.50	89	72						Woods, in leaf Cotton 24"-30" Corn stubble;
	5	1.726	3			0.35				89	72						
Sept. 9-11	3	7.936	2			1.19				90-77	71-68						
	4	5.747	1	12:57PM	2352	1.15	2.70	1.28	0.78	90-77	71-68	0.105	1.37 1:34PM 1.72 3:50PM			0.000	Woods, in leaf Cotton 24"-30" Corn stalks cut; control strip disked
	5	1.726	3			1.46				90-77	71-68						
Sept. 11	3	7.936	2			2.25				77	68						
	4	5.747	1	9:50AM	670	1.64	3.72	2.68	1.74	77	68	0.013	0.20 10:18AM 10.20 10:05AM 0.22 10:10AM			0.001	Woods, in leaf Cotton 24"-30" Corn stubble; bare
	5	1.726	3			2.03				77	68	0.483				1.502	
Sept. 12	3	7.936	2			0.62				81	73						
	4	5.747	1	2:00PM	35	0.62	2.16	1.88	1.22	81	73	See next rain See next rain				1.917 (see next)	Woods, in leaf Cotton 24"-30" Corn stubble; bare
	5	1.726	3			0.62				81	73						
Sept. 12	3	7.936	2			0.04				81	73						
	4	5.747	1	4:10PM	13	0.04	0.36	0.16	0.08	81	73	0.013	6.11 2:21PM 0.71 2:25PM			2.358	Woods, in leaf Cotton 24"-30" Corn stubble; bare
	5	1.726	3			0.04				81	73	0.108				0.066	
Sept. 24	3	7.936	2			0.31				84	71						
	4	5.747	7-F-4	10:40AM	140	0.43	3.00	1.08	0.54	84	71	0.031	No rate			0.053	Woods, in leaf Cotton harvested; oats planted redraked
	5	1.726	3			0.50				84	71						Corn stubble; control strip
Sept. 27	3	7.936	2			0.50				87	73						
	4	5.747	1	12:15PM	162	0.34	1.60	0.76	0.44	87	73	0.008	No rate			0.006	Woods, in leaf Cotton, cont'd out planting Oats drilled on control strip
	5	1.726	3			0.23				87	73						
Oct. 1	3	7.936	2			0.46				89	70						
	4	5.747	1	4:20PM	115	0.42	0.72	0.56	0.46	89	70						Woods, leaves turning Cotton stalks; oats not up
	5	1.726	3			0.38				89	70						Oats & corn stubble

\*See Sept. 11



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS  
 PROJECT SCB Experiment Station, Tylor, Texas

Month, Oct. Nov. &amp; Dec., 1933

Sheet 7 of 8 FIFTEEN

Date	Watershed			Rainfall				Temperature (degrees F)			Run-off					Rainfall minus Run-off (inches)	Run-off (tons per acre)	Condition of Watershed	
	Number	Area (acres)	Days No.	Hours (hour)	Duration (minutes)	Amount (inches)	Maximum Intensity			Maximum	Minimum	Depth (hour)	Excess (hour)	Amount (inches)	Maximum Rate				
							5 minutes (inches per hour)	15 minutes (inches per hour)	30 minutes (inches per hour)						Cu ft. sec.				Time
1933	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	
Oct. 12	3	7,936	2-F-Pb				1.03				66	NRO						Woods (oaks), leaves brown	
	4	5,747	1-F-G	8:40 PM	312		0.69	1.44	0.56	0.90	66	NRO						Cotton, oats	
	5	1,726	3-F-A				0.95				66	NRO						Strip cropped corn stubble, oats	
Oct. 13	3	7,936	2				0.19				63	NRO						Woods, beginning to shed	
	4	5,747	1	11:52 AM	153		0.16	0.24	0.24	0.16	63	NRO						Cotton 24"-30"; oats	
	5	1,726	3				0.15				63	NRO						Corn stubble, oats	
Oct. 15	3	7,936	2				0.03				65	NRO						Woods shedding	
	4	5,747	1	11:40 AM	12		0.04	0.48	0.16	0.08	65	NRO						Cotton 24"-30"; oats	
	5	1,726	3				0.03				65	NRO						Corn stubble, oats	
Oct. 22	3	7,936	2				0.13				65	NRO						Woods shedding	
	4	5,747	1	10:52 AM	103		0.10	0.24	0.16	0.16	65	NRO						Cotton stalks; oats 1"	
	5	1,726	3				0.10				65	NRO						Corn stubble; oats 1"	
Nov. 3	3	7,936	2				0.98				52	NRO						Woods, very few leaves	
	4	5,747	1	8:10 PM	415		0.68	0.84	0.40	0.34	52	NRO						Cotton stalks; oats 1"	
	5	1,726	3				0.67				52	NRO						Corn stubble; oats 1"	
Dec. 1-2	3	7,936	2				1.16				58-61	NRO						Woods, bare	
	4	5,747	1	11:50 PM	660		1.28	3.00	1.68	1.16	58-61	8:03 AM 8:43 AM	0.051	1.05	8:09 AM	0.155	Cotton stalks; oats 2"		
	5	1,726	3				1.10				58-61	10:28 AM 10:53 AM	0.019	0.12	10:33 PM	0.000	Corn stubble; oats 2"		
Dec. 5	3	7,936	2				0.22				63	NRO						Woods, bare	
	4	5,747	1	2:45 PM	190		0.25	0.84	0.40	0.22	63	NRO						Cotton stalks; oats 2"	
	5	1,726	3				0.22				63	NRO						Corn stubble; oats 2"	
Dec. 15-16	3	7,936	2				3.92				65-62	Dec. 16 Dec. 16						Woods, bare	
	4	5,747	1	7:43 PM	1466		3.91	3.12	2.44	2.02	65-62	1:18 AM 1:56 AM	0.066	0.02	1:19 AM	0.004			
	5	1,726	3				3.91				65-62	2:00 AM 5:49 AM		0.58	2:26 AM				
Dec. 15-16	3	7,936	2				3.91				65-62	Dec. 16 Dec. 16						Cotton dormant; oats 3"	
	4	5,747	1	7:43 PM	1466		3.91	3.12	2.44	2.02	65-62	12:40 AM 1:56 AM		4.81	12:51 AM				
	5	1,726	3				3.91				65-62	1:57 AM 2:17 AM		7.39	2:17 AM				
Dec. 15-16	3	7,936	2				3.91				65-62	2:55 AM 4:50 AM		1.37	3:05 AM			Cotton dormant; oats 3"	
	4	5,747	1	7:43 PM	1466		3.91	3.12	2.44	2.02	65-62	2:55 AM 4:50 AM		0.791	3:05 AM				
	5	1,726	3				3.91				65-62	2:55 AM 4:50 AM		0.791	3:05 AM				



2020



MONTH Dec., 19 32  
SHEET 8 OF 8 SHEETS

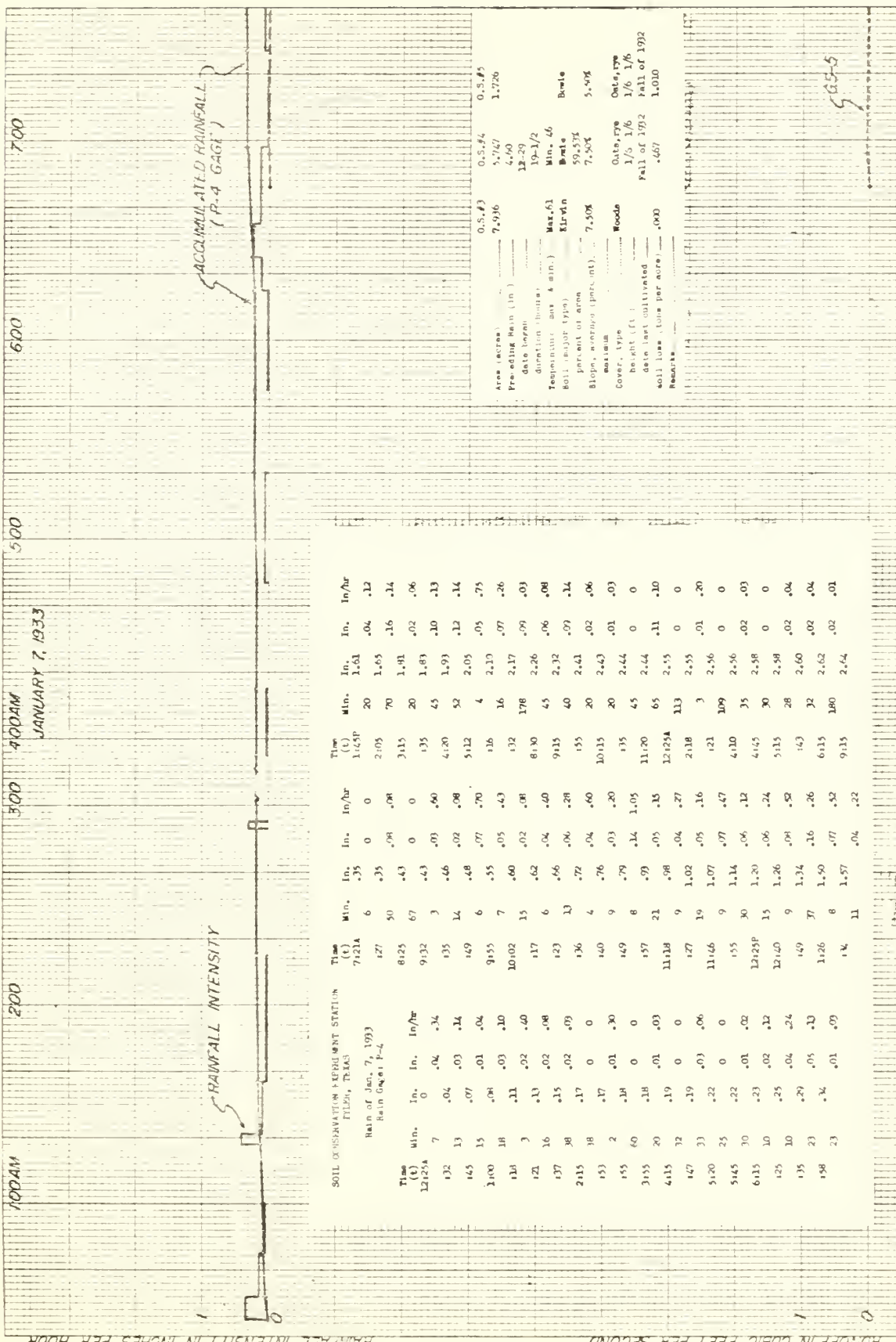
## RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

Project SC8 Experiment Station, Tyler, Texas

[illegible]



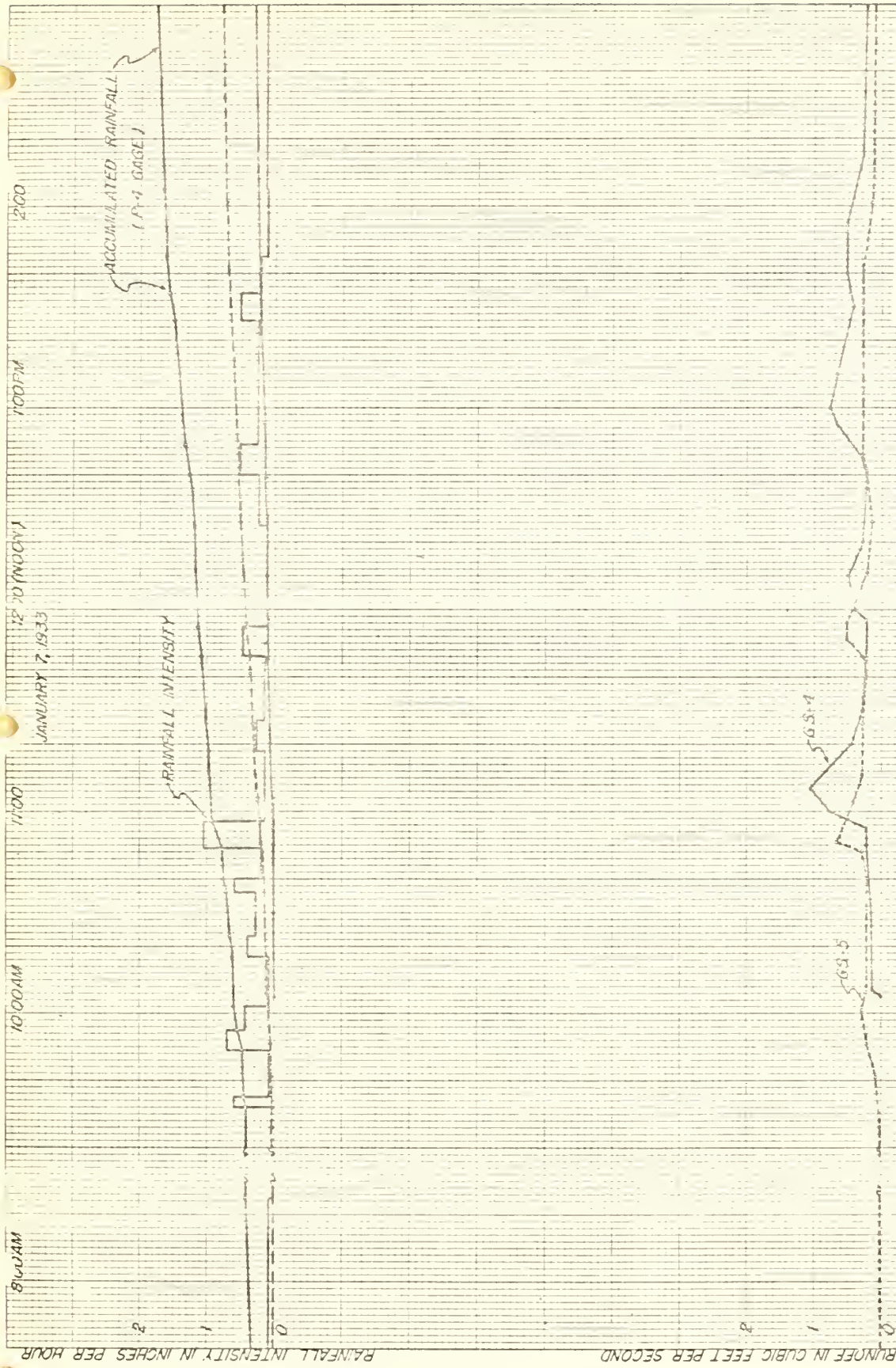
18/1/2022



UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE H. H. BENNETT CHIEF									
SOIL CONSERVATION EXPERIMENT STATION HILZ, TEXAS									
STORM NO. JUNE 29 <sup>th</sup> , 1933									
Plot by 1/2 x 1/2 mile (400' x 400') 1/2 <sup>nd</sup> of 1 mile (800' x 800') 1/4 <sup>th</sup> of 1 mile (1600' x 1600')									
Computation by H. H. BENNETT Date 7/1/33									





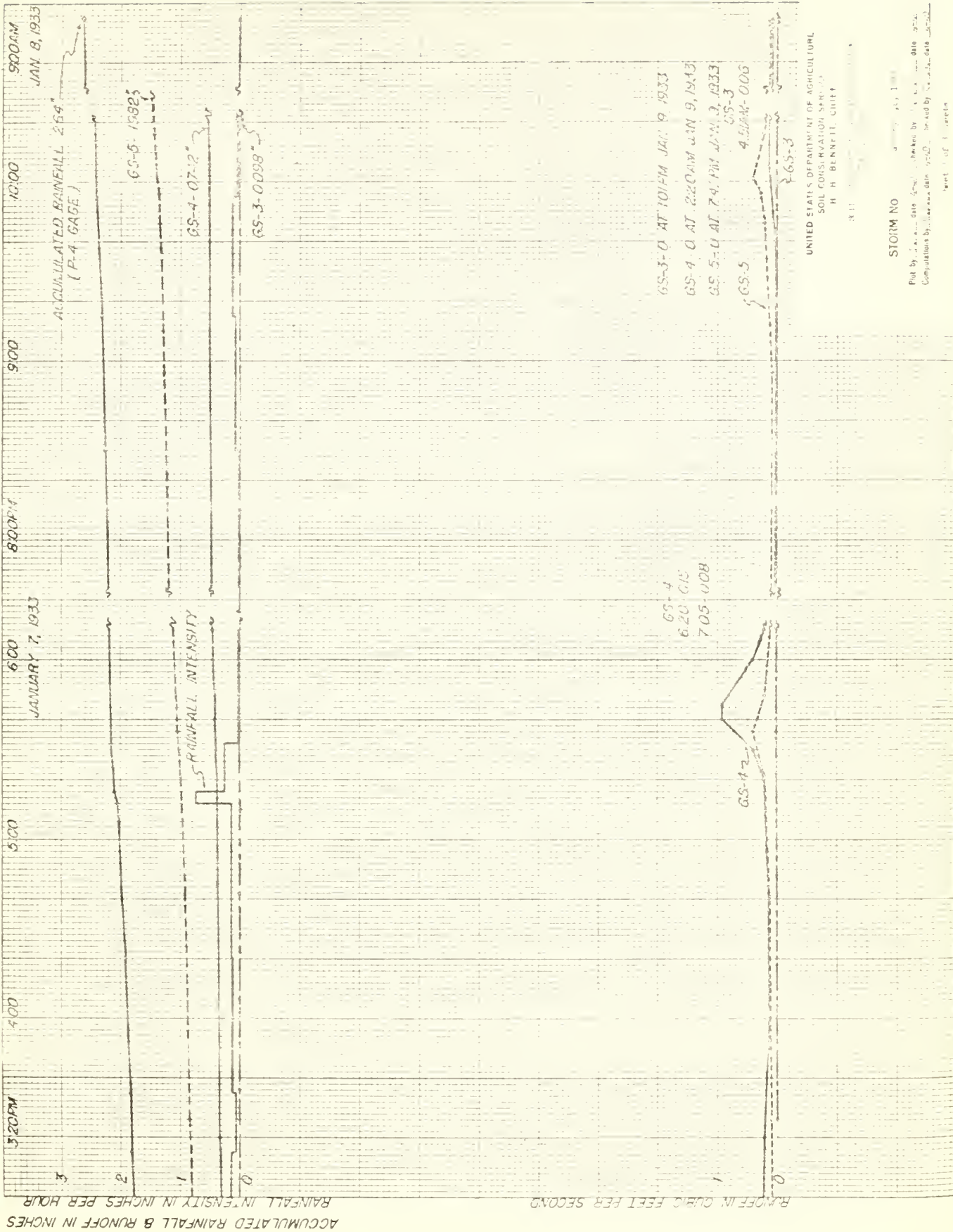


UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 H. H. BENNETT, CHIEF  
 SOIL CONSERVATION EXPERIMENT STATION  
 TULSA, OKLA.

STORM NO. 1037 January 7, 1933

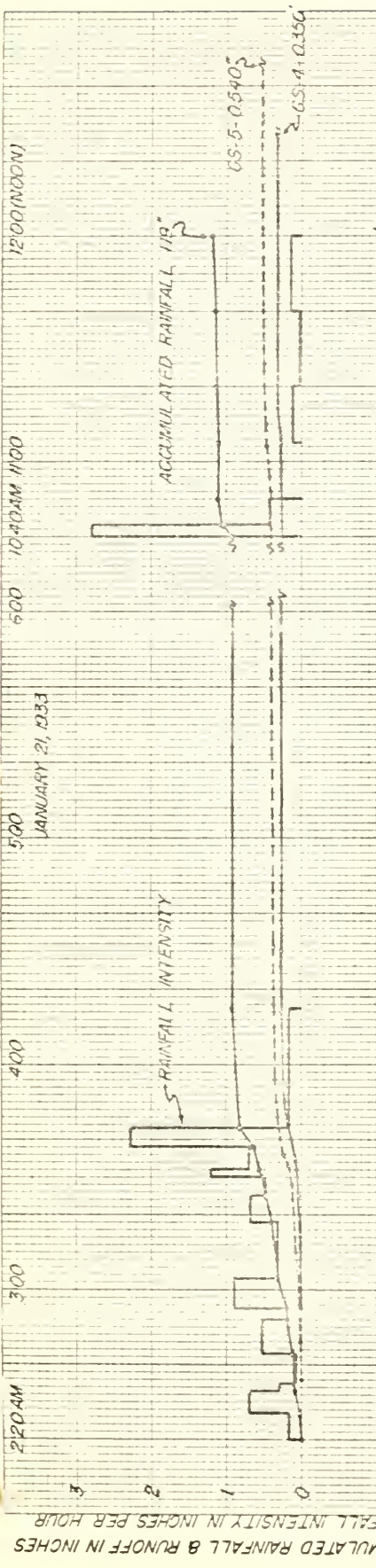
Plot by B.C. date 4-4-33, checked by O.C. date 4-4-33  
 Computed by W.P.C. date 4-4-33, checked by O.C. date 4-4-33









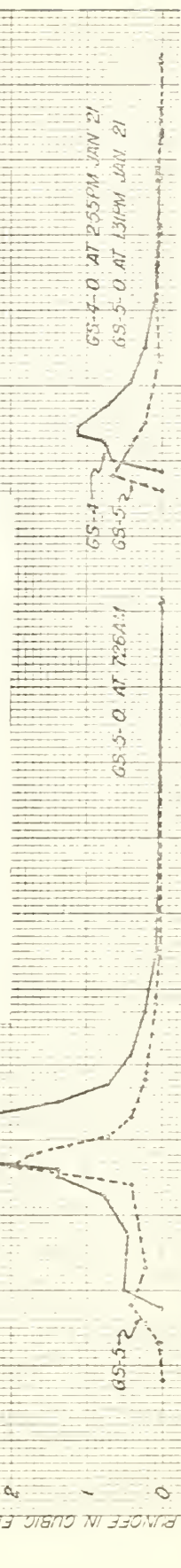


SOIL CONSERVATION EXPERIMENT STATION  
TULSA, TEXAS

Rain of Jan. 21, 1933  
Rain gauge, Field C

Time	Min.	In.	In/hr
2:20A	0	.02	.17
2:27A	7	.02	.10
2:35A	6	.07	.10
2:43A	2	.10	.075
2:51A	8	.21	.08
2:59A	9	.29	.53
3:07A	8	.20	.20
3:15A	15	.22	.20
3:23A	7	.28	.69
3:31A	2	.22	.48
3:39A	6	.29	.17
3:47A	5	.22	.20
3:55A	32	.21	.09
4:03A	385	.01	0
4:11A	3	1.05	.14
4:19A	7	1.10	.05
4:27A	15	1.10	0
4:35A	15	1.12	.32
4:43A	20	1.12	.08
4:51A	20	1.19	.05

Area (acres)	0.343	0.544	0.545
Preceding Rain (in.)	7.98	5.727	1.726
Date begun	Jan. 16	Jan. 27	Jan. 27
Duration (hours)	8-1/2	10-62	10-62
Temperature (max & min.)	Max. 72	Min. 62	62
Soil (major type)	Bowls	59.514	59.514
Percent of area	7.54	7.504	5.504
Soil type	Woody	Woody	Woody
Soil loss (ton per acre)	.000	.000	.000
Soil loss (ton per acre)	.000	.000	.000
Soil loss (ton per acre)	.000	.000	.000



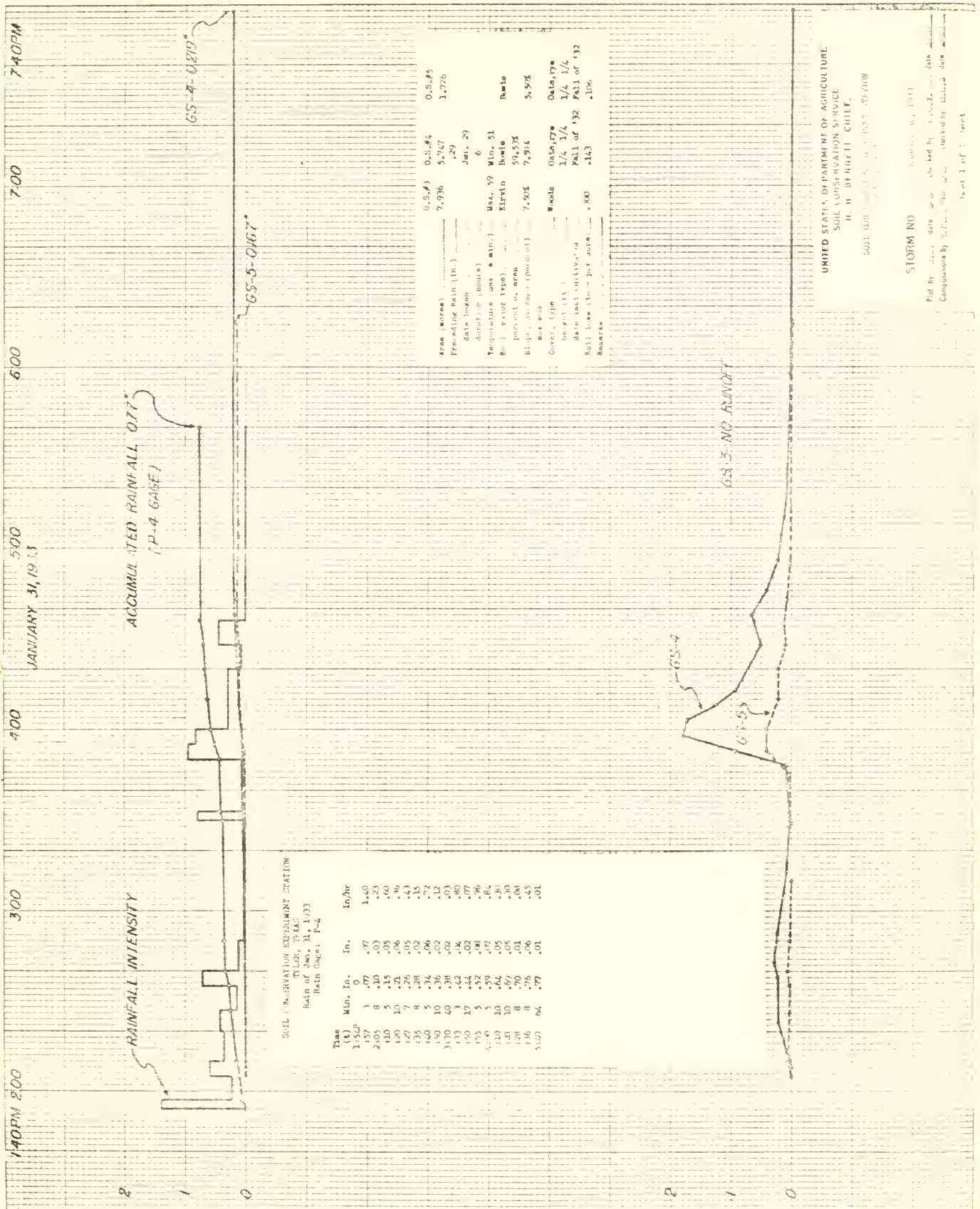
UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT, CHIEF

STATION NO.

By \_\_\_\_\_ Date \_\_\_\_\_  
Checked by \_\_\_\_\_ Date \_\_\_\_\_







SOIL CONSERVATION EXPERIMENT STATION  
TULSA, OKLA.  
Rain of Jan. 31, 1933  
Rain Gage: P-4

Time (t)	Min.	In.	In/hr
1:50P	0	.07	1.20
2:00P	3	.03	.23
2:10P	8	.05	.60
2:20P	5	.05	.76
2:30P	10	.06	.43
2:40P	7	.05	.15
2:50P	8	.02	.72
3:00P	5	.06	.12
3:10P	40	.02	.03
3:20P	9	.02	.08
3:30P	17	.02	.07
3:40P	5	.04	.06
3:50P	5	.09	.04
4:00P	10	.05	.20
4:10P	10	.05	.30
4:20P	8	.01	.00
4:30P	8	.06	.45
4:40P	64	.01	.01

Area (acres)	0.543	0.544	0.545
Fronting rain (in.)	7.936	5.747	1.726
date (month)	Jan.	29	
duration (hours)	6		
Temperature (air & soil)	Max. 59	Min. 51	
611 (air type)	Klein	Boyle	Boyle
percent to area	59.53%		
Boyle, acres (percent)	7.50%		
max area			
Govt. type			
height (ft.)			
date last cultivated			
Roll down (tons per acre)	200		
Roll down	.143		
Roll down	.106		

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. DENNETT CHIEF  
SOIL CONSERVATION SERVICE  
STATION NO. 1001  
Plot by date and by date  
Computations by H. H. Dennett  
Part 1 of 1 sheet



**RAINFALL INTENSITY**

**ACCUMULATED RAINFALL 100 (FIELD "C" GAGE)**

**65-4-Q. AT 1200 INCH**

**65-5, NO RUNOFF FROM CHART**

**SILT BOX, LAUREL HILLS**

**MARCH 5, 1933**

**UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT, CHIEF**

SOIL CONSERVATION EXPERIMENT STATION TULSA, TEXAS (date of Mar. 5, 1933 Rain gages Field C)									
Time (t)	Min.	In.	In/hr	Min.	In.	In/hr	Min.	In.	In/hr
2:45P									
3:00	15	0	0	2	.29	.60	7	.76	.09
3:15	5	.02	.08	3	.31	.40	10	.77	.12
3:30	3	.03	.12	11	.33	.38	17	.78	.09
3:45	7	.04	.20	6	.40	.20	22	.80	.24
4:00	5	.05	.20	1	.42	0	27	.82	.24
4:15	3	.06	.20	7	.45	.26	30	.83	.20
4:30	7	.07	.20	18	.45	.33	38	.85	.15
4:45	5	.08	.20	4	.55	.30	45	.85	0
5:00	3	.09	.20	5	.57	.48	50	.85	.24
5:15	5	.10	.20	8	.61	.30	55	.89	.12
5:30	2	.11	.20	2	.65	0	60	.91	.08
5:45	3	.12	.20	2	.65	.60	65	.92	.12
6:00	5	.13	.20	3	.67	.20	70	.93	.17
6:15	3	.14	.20	45	.68	.03	75	.95	.06
6:30	3	.15	.20	38	.70	0	80	.96	0
6:45	2	.16	.20	6	.70	.15	85	.96	.20
7:00	2	.17	.20	6	.71	0	90	.98	.12
7:15	2	.18	.20	20	.71	.04	95	.99	.01
7:30	3	.19	.20	3	.75	0	100	1.00	.04

G.S.A.O. AT 12:00. (MOT.)  
MARCH 5, 1933

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT, CHIEF

STORM NO. 6079, 1911

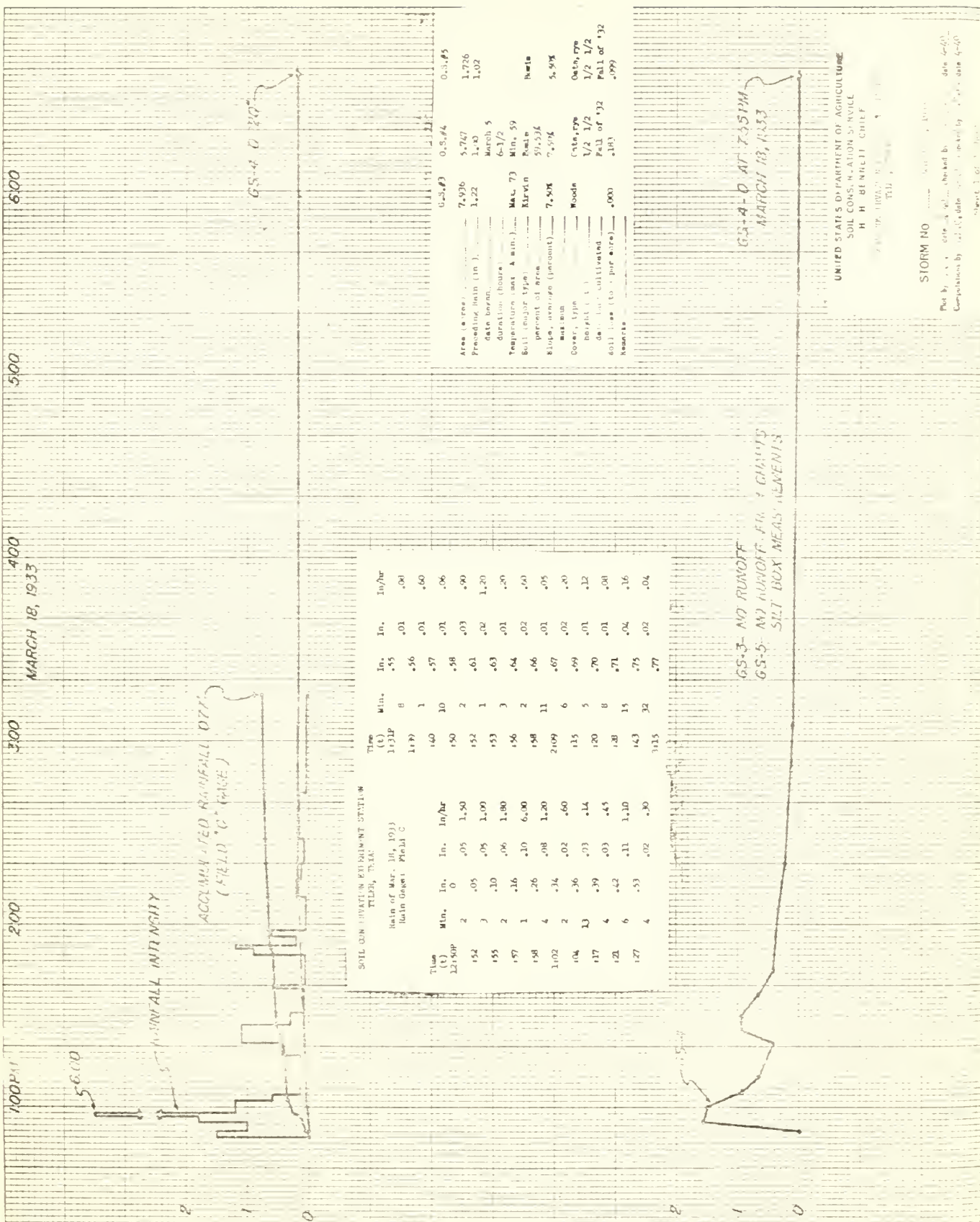
of  $\mathcal{D}$  by  $\mathcal{D}_\alpha C$ , date  $t_{\alpha-1}^{(i)}$  is, and by  $\mathcal{Q}_\alpha C_\alpha n_\alpha$  date  $t_\alpha$ .  
 solution of  $\mathcal{I}_\alpha^D C_\alpha$  data  $\alpha-1$  is, and by  $\mathcal{I}_\alpha^D n_\alpha$  date  $t_\alpha$ .

2000 11 11





ACCUMULATED RAINFALL & RUNOFF IN INCHES  
RAINFALL INTENSITY IN INCHES PER HOUR



SOIL CONSERVATION EXPERIMENT STATION  
TULSA, OKLA.

Time (t)	Min.	In.	In/hr	Min.	In.	In/hr
12:30 PM	2	.05	1.50	140	.57	.06
1:02	3	.05	1.00	150	.58	.03
1:17	2	.10	.06	152	.61	.02
1:27	1	.16	1.80	153	.63	.01
1:58	4	.26	1.00	156	.64	.02
2:02	2	.34	.08	158	.66	.01
2:04	3	.36	.03	2:09	.67	.02
2:17	4	.39	.03	155	.69	.01
2:27	6	.42	.11	160	.70	.01
2:37	4	.53	.02	163	.75	.04
				165	.77	.04

Area (acres)	7.926	0.546	0.345
Preceding rain (in.)	5.747	1.22	1.02
Date begun	March 5		
Duration (hours)	6-1/2		
Temperature (max & min)	Max. 73 Min. 59		
Soil (major type)	Clay		
Percent of area	51.536		
Slope, average (in/100)	7.50%		
Cover, type	Woody		
Height (ft)			
Soil loss (to surface)	.000		
Soil loss (to per acre)	.183		
Remarks			

65-3- NO RUNOFF  
65-5- NO RUNOFF FR. 7 CHANIS  
SILT BOX MEAS. 14.6 IN.

65-4-0 AT 7:55 PM  
MARCH 18, 1933

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT, CHIEF

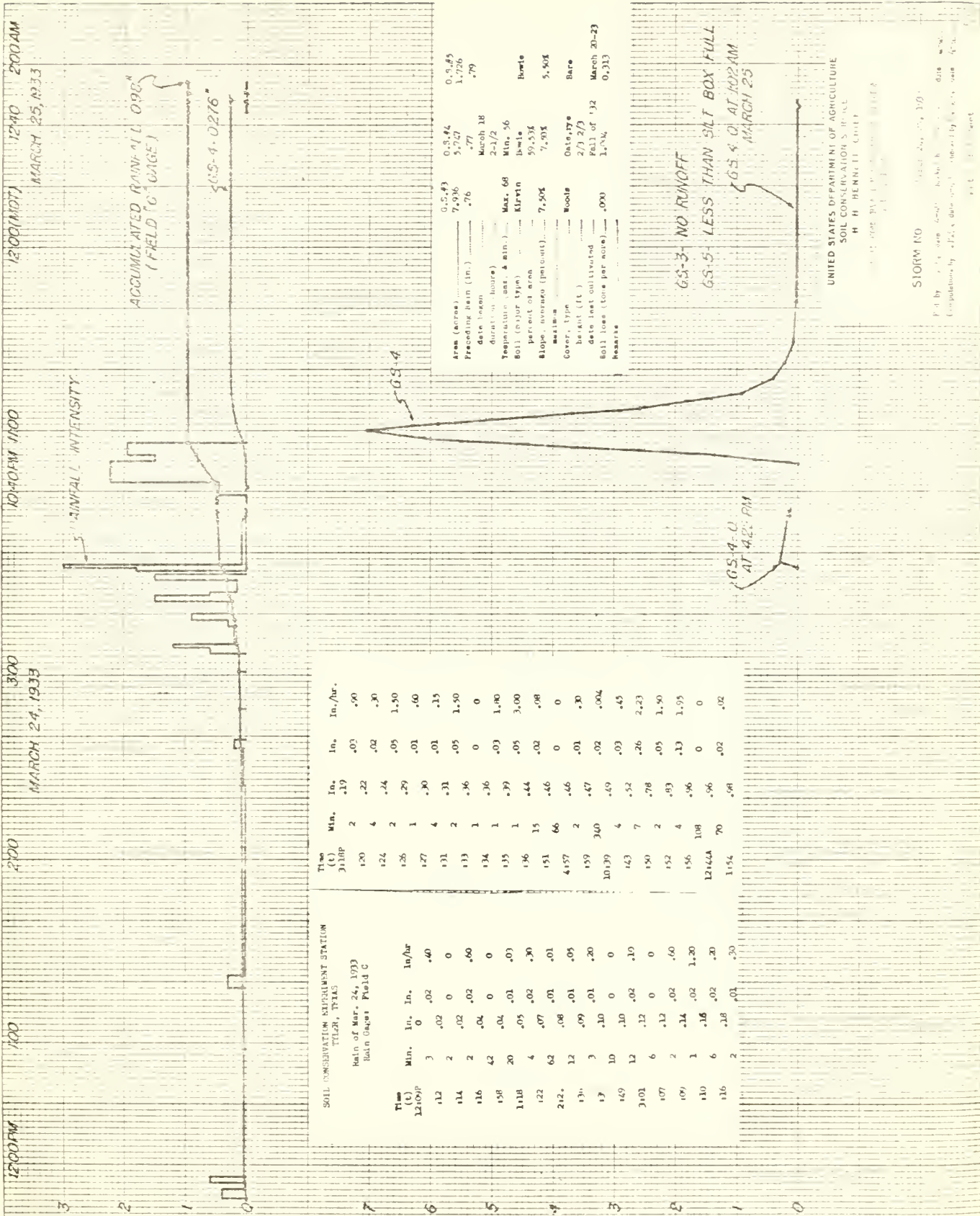
STORM NO.

Plot by ... date 4-10  
Compilation by ... date 4-10





ACCUMULATED RAINFALL & RUNOFF IN INCHES  
 RAINFALL INTENSITY IN INCHES PER HOUR



SOIL CONSERVATION EXPERIMENT STATION  
 TULSA, OKLA.

Rain of Mar. 24, 1933  
 Rain Gauge Field C

Time (h)	Min.	In.	In.	In./hr.
12:00 PM	3	.02	.02	.60
12:06	2	.02	.02	.30
12:12	2	.04	.05	1.30
12:18	2	.04	.05	.60
12:24	4	.29	.01	.15
12:30	4	.31	.05	1.30
12:36	2	.36	0	0
12:42	1	.36	.03	1.30
12:48	1	.39	.05	3.00
12:54	15	.44	.02	.08
1:00	66	.46	0	0
1:06	2	.47	.01	.30
1:12	36	.49	.02	.06
1:18	4	.53	.03	.45
1:24	7	.78	.26	2.23
1:30	2	.83	.05	1.50
1:36	4	.86	.13	1.95
1:42	108	.86	0	0
1:48	70	.86	.02	.02
1:54		.68		

Area (acres).....	0.543	0.544	0.545
Preceding rain (in.).....	7.936	7.937	7.938
Duration (hours).....	2-1/2	March 18	March 20-23
Temperature (max. & min.).....	Max. 68	Min. 56	
Soil (major type).....	Kirwin	Howie	
Soil (average).....	7.50%	7.50%	5.50%
Cover, type.....	Woody	Woody	Bare
Height (ft).....	2 2/3	2 2/3	2 2/3
Date first cultivated.....	0.00	0.00	0.00
Soil loss (tons per acre).....	0.00	0.00	0.00
Remarks.....			

UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 H. H. HENRIKSEN, CHIEF

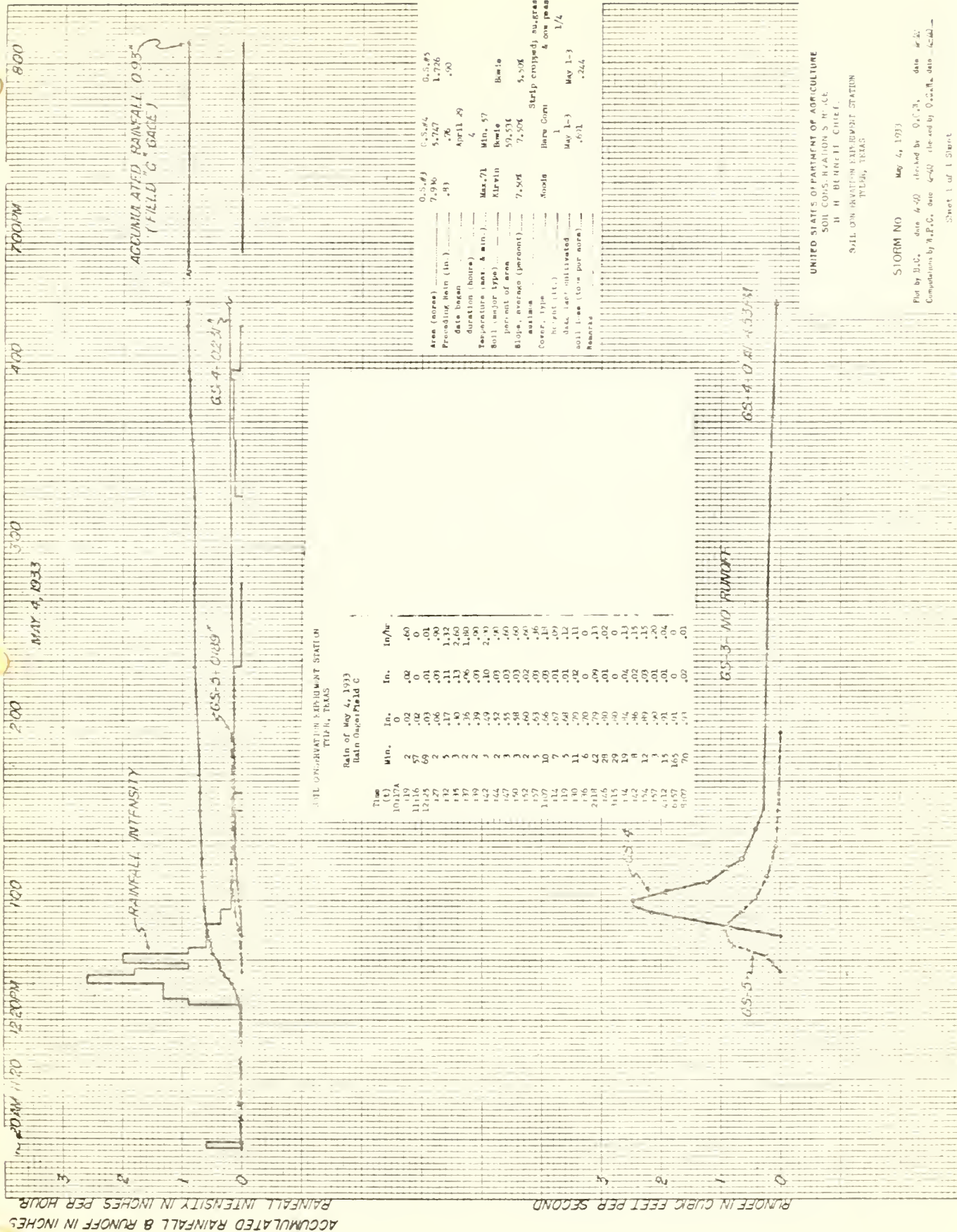
STORM NO. 100  
 Date Mar. 24, 1933  
 Plotted by H. H. Henrikson  
 Compiled by H. H. Henrikson  
 Date Mar. 24, 1933











SOIL CONSERVATION EXPERIMENT STATION  
TULSA, TEXAS

Rain of May 4, 1933

Rain Gauge Field C

Time (t)	Min.	In.	In/hr
11:20	0	.02	.60
11:25	2	.03	.01
11:30	5	.04	.01
11:35	8	.05	.01
11:40	12	.06	.01
11:45	17	.11	1.32
11:50	3	.13	2.60
11:55	2	.16	1.80
12:00	2	.19	.90
12:05	2	.29	.90
12:10	2	.32	.90
12:15	2	.35	.90
12:20	3	.38	.90
12:25	2	.40	.90
12:30	2	.43	.90
12:35	5	.66	.96
12:40	10	.67	.01
12:45	7	.68	.01
12:50	5	.69	.02
12:55	11	.70	.02
1:00	6	.71	.01
1:05	2	.72	.01
1:10	2	.73	.01
1:15	2	.74	.01
1:20	2	.75	.01
1:25	2	.76	.01
1:30	2	.77	.01
1:35	2	.78	.01
1:40	2	.79	.01
1:45	2	.80	.01
1:50	2	.81	.01
1:55	2	.82	.01
2:00	2	.83	.01
2:05	2	.84	.01
2:10	2	.85	.01
2:15	2	.86	.01
2:20	2	.87	.01
2:25	2	.88	.01
2:30	2	.89	.01
2:35	2	.90	.01
2:40	2	.91	.01
2:45	2	.92	.01
2:50	2	.93	.01
2:55	2	.94	.01
3:00	2	.95	.01

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. B. HERRICK, CHIEF  
SOIL CONSERVATION EXPERIMENT STATION  
TULSA, TEXAS

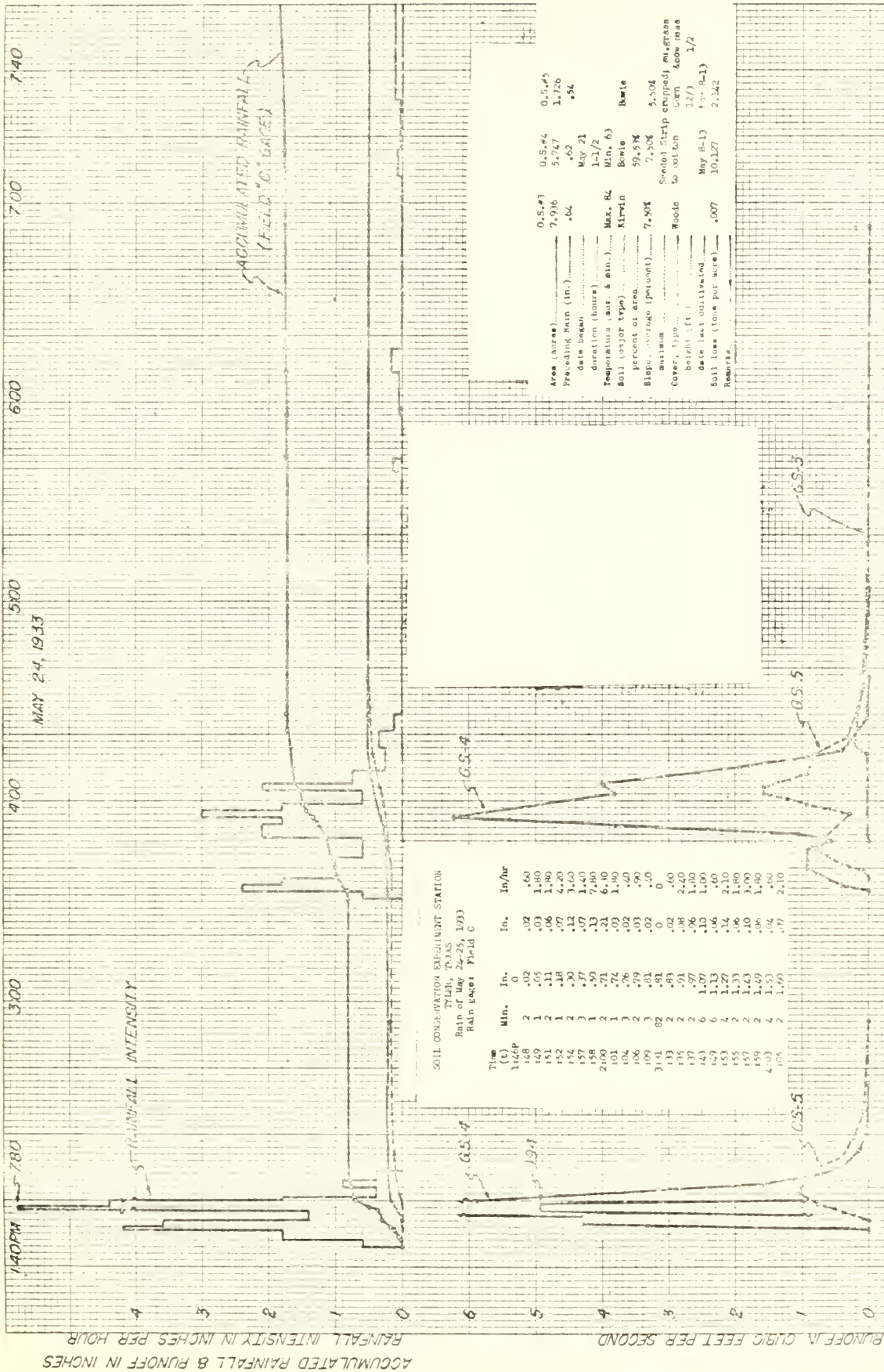
STORM NO. May 4, 1933

Plot by D.C. date 4-40 checked by O.P.P. date 4-40  
Computation by H.P.G. date 4-40 checked by O.P.P. date 4-40

Sheet 1 of 1 Sheet







# SOIL CONSERVATION EXPERIMENT STATION

TYLER, TEXAS

Rain of May 24-25, 1933

Rain Gage Field C

Time (C)	Min.	In.	In.	In/hr
1400	2	.02	.02	.60
1410	2	.02	.02	.60
1420	2	.02	.02	.60
1430	2	.02	.02	.60
1440	2	.02	.02	.60
1450	2	.02	.02	.60
1500	2	.02	.02	.60
1510	2	.02	.02	.60
1520	2	.02	.02	.60
1530	2	.02	.02	.60
1540	2	.02	.02	.60
1550	2	.02	.02	.60
1600	2	.02	.02	.60
1610	2	.02	.02	.60
1620	2	.02	.02	.60
1630	2	.02	.02	.60
1640	2	.02	.02	.60
1650	2	.02	.02	.60
1700	2	.02	.02	.60
1710	2	.02	.02	.60
1720	2	.02	.02	.60
1730	2	.02	.02	.60
1740	2	.02	.02	.60
1750	2	.02	.02	.60
1800	2	.02	.02	.60
1810	2	.02	.02	.60
1820	2	.02	.02	.60
1830	2	.02	.02	.60
1840	2	.02	.02	.60
1850	2	.02	.02	.60
1900	2	.02	.02	.60
1910	2	.02	.02	.60
1920	2	.02	.02	.60
1930	2	.02	.02	.60
1940	2	.02	.02	.60
1950	2	.02	.02	.60
2000	2	.02	.02	.60
2010	2	.02	.02	.60
2020	2	.02	.02	.60
2030	2	.02	.02	.60
2040	2	.02	.02	.60
2050	2	.02	.02	.60
2100	2	.02	.02	.60
2110	2	.02	.02	.60
2120	2	.02	.02	.60
2130	2	.02	.02	.60
2140	2	.02	.02	.60
2150	2	.02	.02	.60
2200	2	.02	.02	.60
2210	2	.02	.02	.60
2220	2	.02	.02	.60
2230	2	.02	.02	.60
2240	2	.02	.02	.60
2250	2	.02	.02	.60
2300	2	.02	.02	.60
2310	2	.02	.02	.60
2320	2	.02	.02	.60
2330	2	.02	.02	.60
2340	2	.02	.02	.60
2350	2	.02	.02	.60
2400	2	.02	.02	.60

Area (acres)	0.543	0.544	0.545
Preceding Rain (in.)	7.936	5.747	1.726
Date begun	.64	May 21	.64
Duration (hours)	1-1/2	1-1/2	1-1/2
Temperature (air & soil)	Max. 84	Min. 63	Bowie
Soil (major type)	Min. 84	Max. 84	Bowie
Percent of area	7.50%	7.50%	7.50%
Slope (average) (percent)	7.50%	7.50%	7.50%
Cover, type	Woody	Woody	Woody
Soil loss (ton per acre)	.007	May 8-13	12/3
Remarks			

UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

W. H. BURNETT, CHIEF

STATION NO. 100

DATE 5-24-33

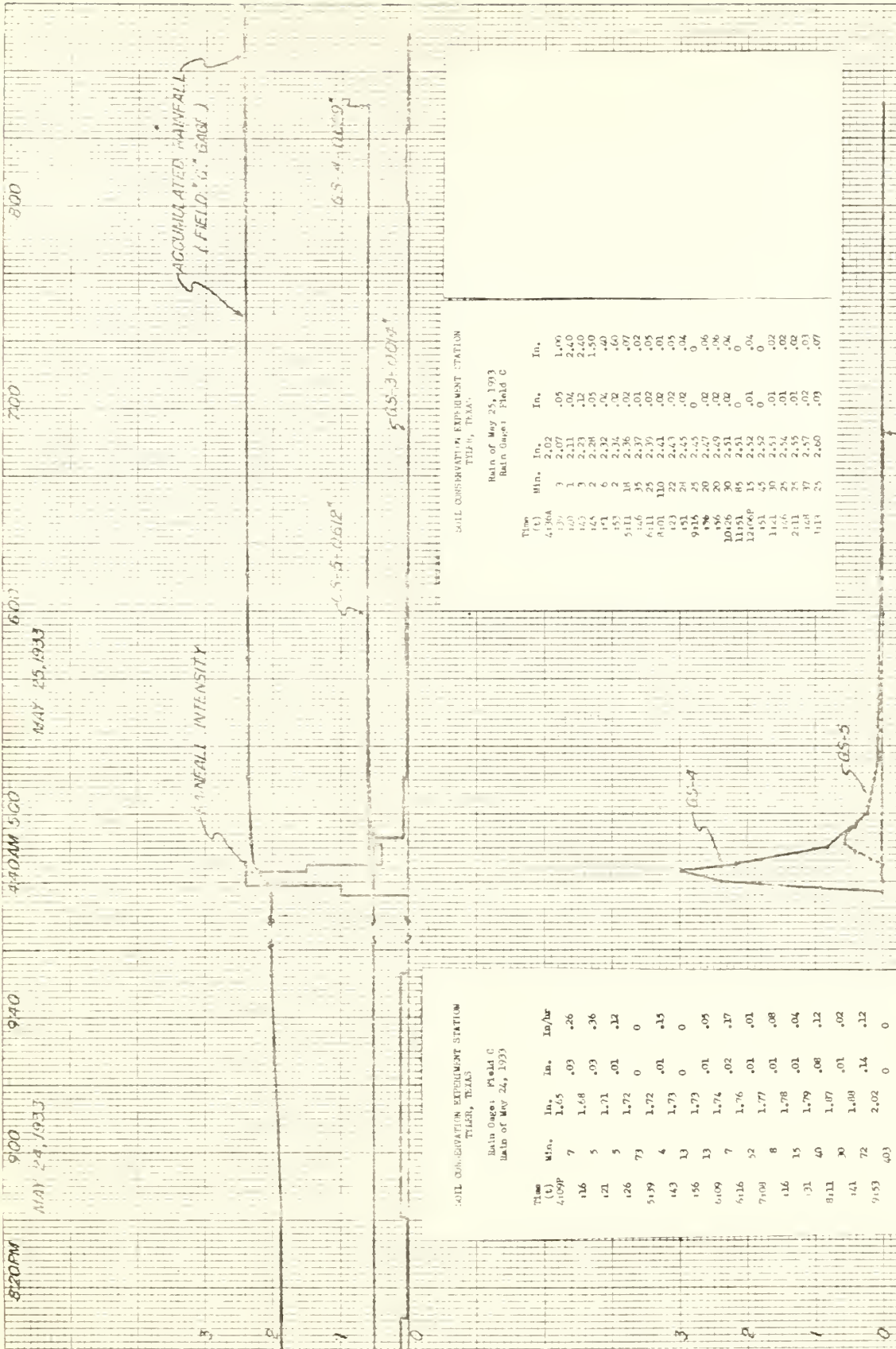
UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

W. H. BURNETT, CHIEF

STATION NO. 100





ACCUMULATED RAINFALL & RUNOFF IN INCHES

RUNOFF IN CUBIC FEET PER SECOND

SOIL CONSERVATION EXPERIMENT STATION  
TILLER, TEXAS

Rain Gauge: Field C  
Rain of May 24, 1933

Time (hr:min)	Min.	In.	In.	10/hr
8:20	7	1.65	.03	.26
8:26	5	1.68	.03	.36
8:32	5	1.71	.01	.12
8:38	7	1.72	0	0
8:44	4	1.72	.01	.15
8:50	13	1.73	0	0
8:56	13	1.73	.01	.05
9:02	7	1.74	.02	.17
9:08	52	1.76	.01	.01
9:14	8	1.77	.01	.08
9:20	15	1.78	.01	.04
9:26	40	1.79	.06	.12
9:32	30	1.87	.01	.02
9:38	72	1.88	.14	.12
9:44	403	2.02	0	0

SOIL CONSERVATION EXPERIMENT STATION  
TILLER, TEXAS

Rain of May 25, 1933  
Rain Gauge: Field C

Time (hr:min)	Min.	In.	In.	In.
4:58A	3	2.07	.05	1.00
5:04	1	2.11	.04	2.40
5:10	3	2.23	.12	2.40
5:16	2	2.28	.05	1.50
5:22	6	2.32	.04	.40
5:28	2	2.34	.02	.60
5:34	18	2.36	.02	.07
5:40	15	2.37	.01	.05
5:46	25	2.37	.02	.05
5:52	30	2.37	.02	.05
5:58	110	2.41	.02	.01
6:04	22	2.43	.02	.05
6:10	24	2.45	.02	.04
6:16	25	2.45	0	0
6:22	20	2.47	.02	.06
6:28	20	2.49	.02	.06
6:34	30	2.51	.02	.04
6:40	15	2.51	.01	.04
6:46	15	2.52	0	0
6:52	45	2.52	.01	.04
6:58	30	2.53	.01	.02
7:04	25	2.54	.01	.02
7:10	28	2.55	.01	.02
7:16	37	2.57	.02	.03
7:22	25	2.60	.03	.07

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT CHIEF

SOIL CONSERVATION EXPERIMENT STATION  
TILLER, TEXAS

STORM NO. 1000 May 24-25, 1933

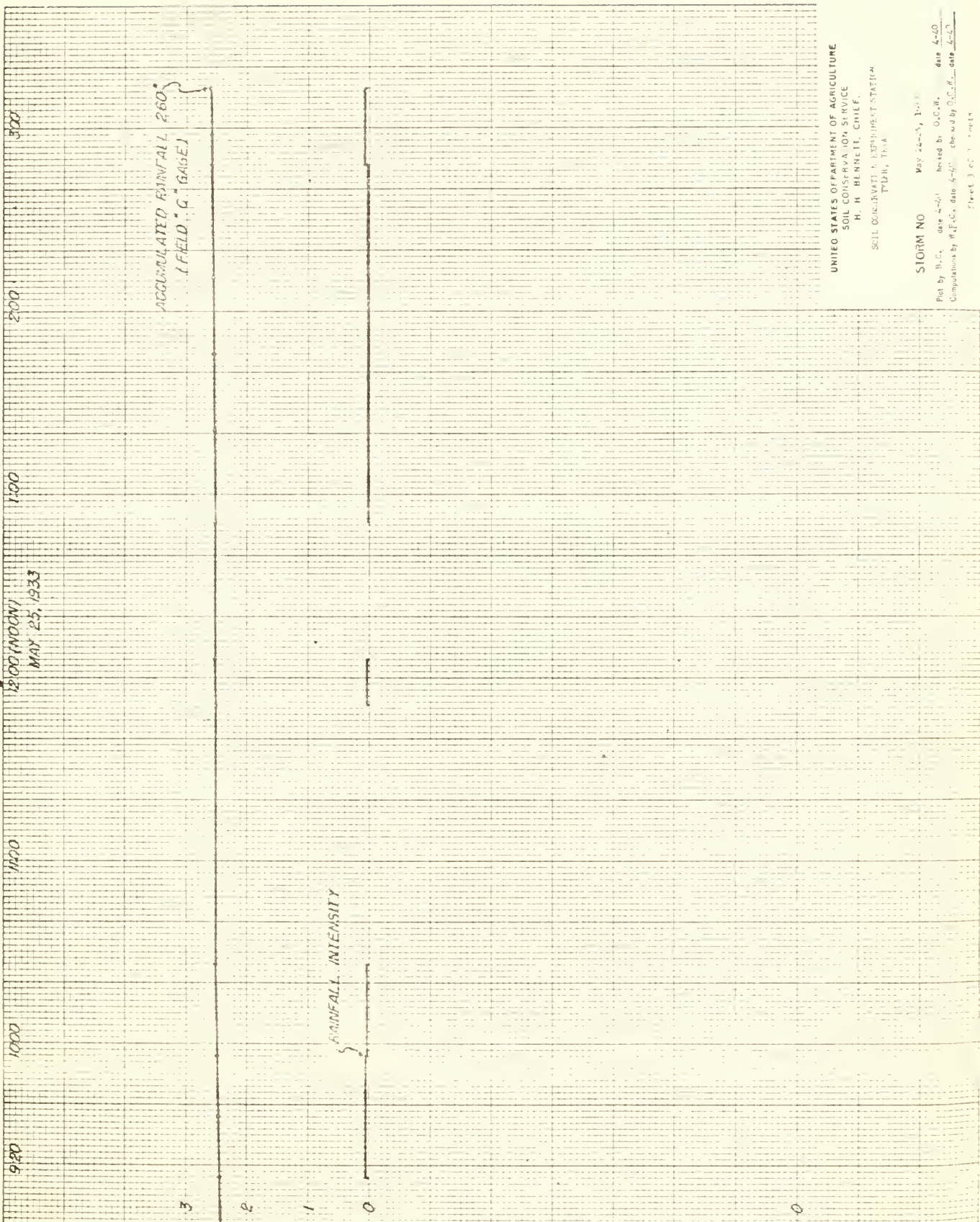
Plot by T. L. date 4-20 checked by O. L. date 6-22  
Computations by H. L. date 7-22 checked by O. L. date 8-9





ACCUMULATED RAINFALL & RUNOFF IN INCHES

RUNOFF IN CUBIC FEET PER SECOND



UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT, CHIEF  
SOIL CONSERVATION EXPERIMENT STATION  
MURKIN, TEXAS

STORM NO. May 24-25, 1933

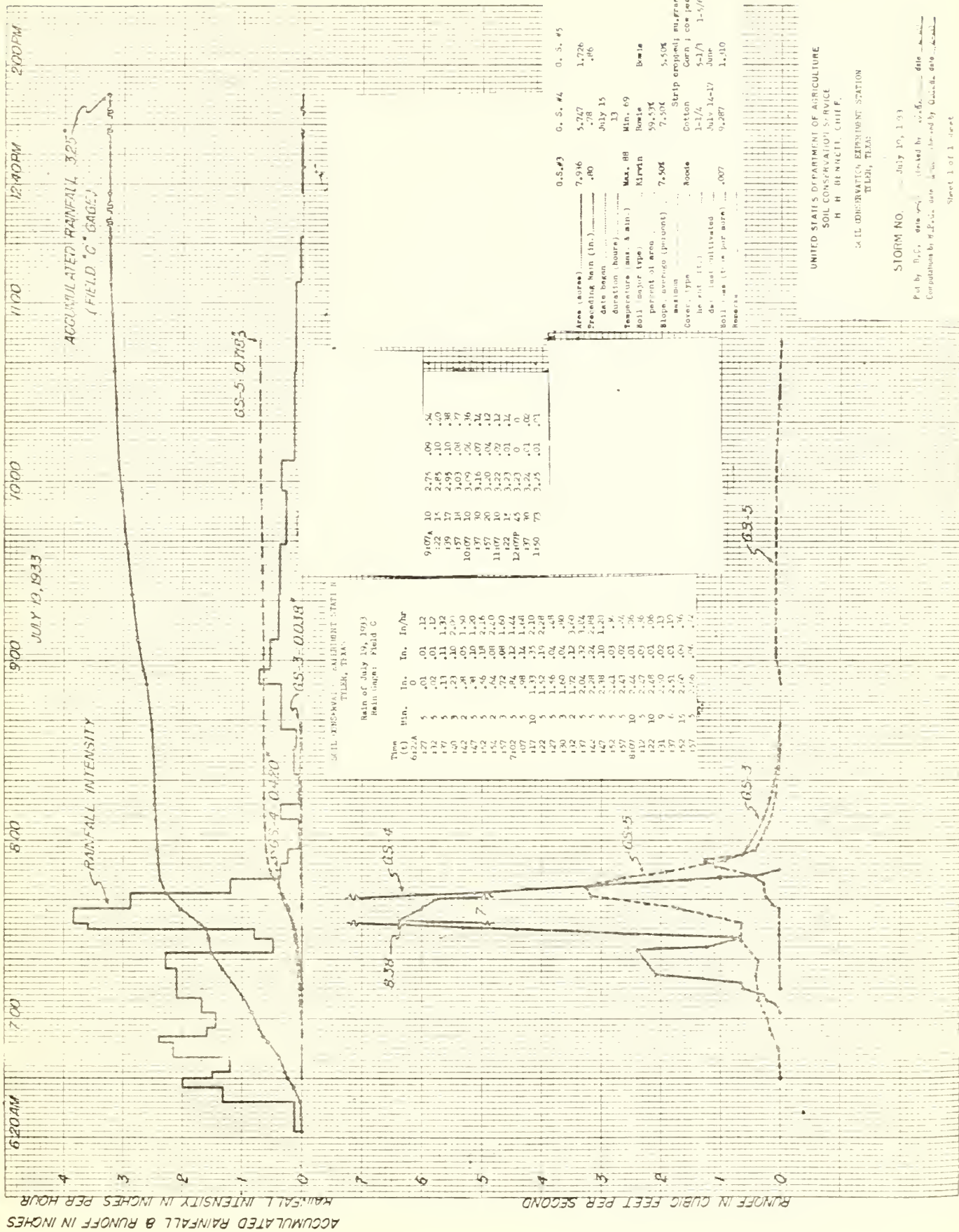
Plot by H.C. date 4-20 checked by G.C.M. date 4-20

Computations by H.C. date 4-20 checked by G.C.M. date 4-20

Sheet 3 of 3







ACCUMULATED RAINFALL & RUNOFF IN INCHES

RUNOFF IN CUBIC FEET PER SECOND

SOIL TEMPERATURE, ELEVATION, STATE, & TIME, TEXAS.

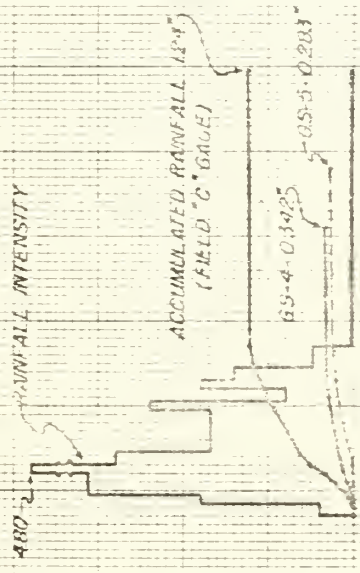
Rain of July 19, 1933  
Rain gauge: Field C

Time (t)	min.	In.	In.	In/hr
6:22 A	0	.01	.01	.12
6:27	5	.02	.01	.12
6:32	5	.11	.11	1.32
6:37	5	.11	.10	1.32
6:42	5	.23	.10	2.30
6:47	5	.28	.05	1.50
6:52	5	.41	.10	1.50
6:57	5	.46	.18	2.16
7:02	5	.64	.08	2.00
7:07	5	.72	.08	1.60
7:12	5	.64	.12	1.44
7:17	5	.64	.15	1.60
7:22	5	1.32	.15	2.10
7:27	5	1.32	.19	2.28
7:32	5	1.46	.04	.48
7:37	5	1.60	.04	.60
7:42	5	1.72	.12	3.60
7:47	5	2.04	.32	1.04
7:52	5	2.28	.24	2.88
7:57	5	2.18	.10	1.20
8:02	5	2.44	.02	.24
8:07	10	2.44	.01	.06
8:12	5	2.47	.01	.06
8:17	10	2.47	.01	.06
8:22	10	2.47	.01	.06
8:27	10	2.47	.01	.06
8:32	10	2.47	.01	.06
8:37	10	2.47	.01	.06
8:42	10	2.47	.01	.06
8:47	10	2.47	.01	.06
8:52	5	2.44	.03	.96
8:57	5	2.44	.06	.96
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9:07	10	2.47	.01	.06
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9:17	10	2.47	.01	.06
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10:22	10	2.47	.01	.06
10:27	10	2.47	.01	.06
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10:37	10	2.47	.01	.06
10:42	10	2.47	.01	.06
10:47	10	2.47	.01	.06
10:52	10	2.47	.01	.06
10:57	10	2.47	.01	.06
11:02	10	2.47	.01	.06
11:07	10	2.47	.01	.06
11:12	10	2.47	.01	.06
11:17	10	2.47	.01	.06
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11:27	10	2.47	.01	.06
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11:47	10	2.47	.01	.06
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11:52	10	2.47	.01	.06
11:57	10	2.47	.01	.06
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3:47	10	2.47	.01	.06
3:52	10	2.47	.01	.06
3:57	10	2.47	.01	.06
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5:37	10	2.47	.01	.06
5:42	10	2.47	.01	.06
5:47	10	2.47	.01	.06
5:52	10	2.47	.01	.06
5:57	10	2.47	.01	.06
6:02	10	2.47	.01	.06
6:07	10	2.47	.01	.06



4:20 PM 500 600  
AUGUST 25, 1933

ACCUMULATED RAINFALL & RUNOFF IN INCHES  
RAINFALL INTENSITY IN INCHES PER HOUR



SOIL CONSERVATION EXPERIMENT STATION  
DALLAS, TEXAS

Time	Min.	In.	In/hr
4:15	1	0.02	0.40
4:30	2	0.08	0.40
4:45	3	0.16	0.40
5:00	4	0.24	0.40
5:15	5	0.32	0.40
5:30	6	0.40	0.40
5:45	7	0.48	0.40
6:00	8	0.56	0.40
6:15	9	0.64	0.40
6:30	10	0.72	0.40
6:45	11	0.80	0.40
7:00	12	0.88	0.40
7:15	13	0.96	0.40
7:30	14	1.04	0.40
7:45	15	1.12	0.40
8:00	16	1.20	0.40
8:15	17	1.28	0.40
8:30	18	1.36	0.40
8:45	19	1.44	0.40
9:00	20	1.52	0.40
9:15	21	1.60	0.40
9:30	22	1.68	0.40
9:45	23	1.76	0.40
10:00	24	1.84	0.40
10:15	25	1.92	0.40
10:30	26	2.00	0.40
10:45	27	2.08	0.40
11:00	28	2.16	0.40
11:15	29	2.24	0.40
11:30	30	2.32	0.40
11:45	31	2.40	0.40
12:00	32	2.48	0.40
12:15	33	2.56	0.40
12:30	34	2.64	0.40
12:45	35	2.72	0.40
13:00	36	2.80	0.40
13:15	37	2.88	0.40
13:30	38	2.96	0.40
13:45	39	3.04	0.40
14:00	40	3.12	0.40
14:15	41	3.20	0.40
14:30	42	3.28	0.40
14:45	43	3.36	0.40
15:00	44	3.44	0.40
15:15	45	3.52	0.40
15:30	46	3.60	0.40
15:45	47	3.68	0.40
16:00	48	3.76	0.40
16:15	49	3.84	0.40
16:30	50	3.92	0.40
16:45	51	4.00	0.40
17:00	52	4.08	0.40
17:15	53	4.16	0.40
17:30	54	4.24	0.40
17:45	55	4.32	0.40
18:00	56	4.40	0.40
18:15	57	4.48	0.40
18:30	58	4.56	0.40
18:45	59	4.64	0.40
19:00	60	4.72	0.40
19:15	61	4.80	0.40
19:30	62	4.88	0.40
19:45	63	4.96	0.40
20:00	64	5.04	0.40
20:15	65	5.12	0.40
20:30	66	5.20	0.40
20:45	67	5.28	0.40
21:00	68	5.36	0.40
21:15	69	5.44	0.40
21:30	70	5.52	0.40
21:45	71	5.60	0.40
22:00	72	5.68	0.40
22:15	73	5.76	0.40
22:30	74	5.84	0.40
22:45	75	5.92	0.40
23:00	76	6.00	0.40
23:15	77	6.08	0.40
23:30	78	6.16	0.40
23:45	79	6.24	0.40
24:00	80	6.32	0.40

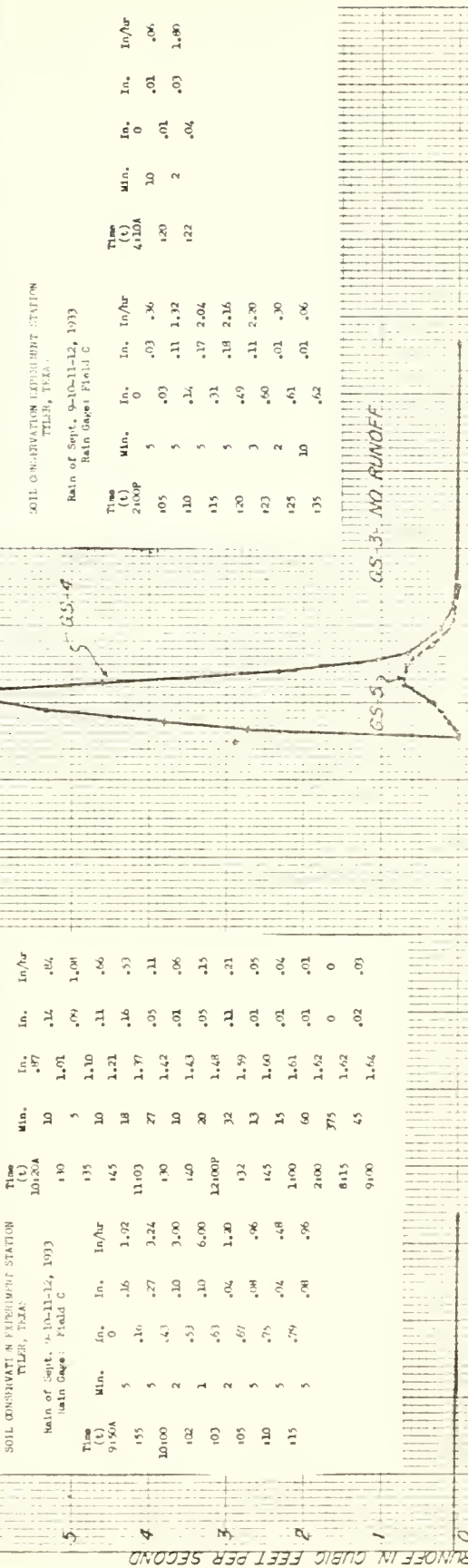
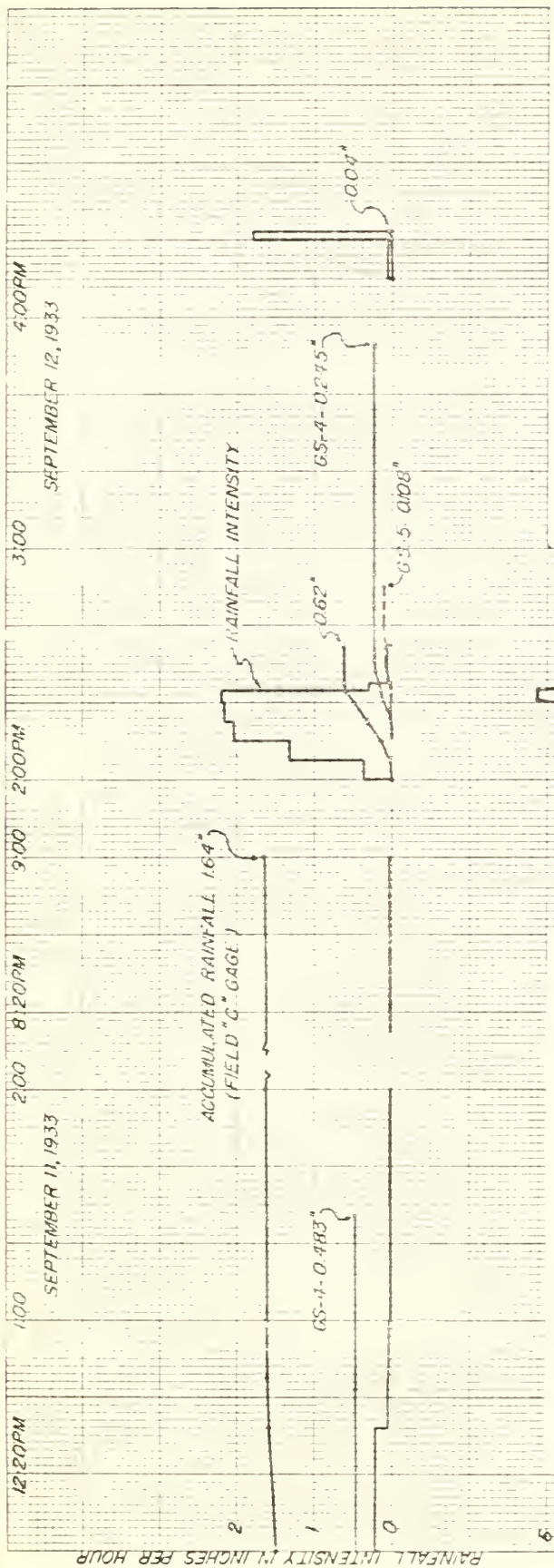
1523











UNITED STATES DEPARTMENT OF AGRICULTURE									
SOIL CONSERVATION SERVICE									
H. H. BENNETT, CHIEF.									
SOIL CONSERVATION EXPERIMENT STATION									
TULSA, TEXAS.									

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT, CHIEF  
SOIL CONSERVATION EXPERIMENT STATION  
TULSA, TEXAS.

STORM NO. 9, 10, 11, 12, 1933

Run by Tulsa den & QO checked by Q. W. H. den & Q. W. H. den

Computation by H. H. Bennett, den & Q. W. H. den

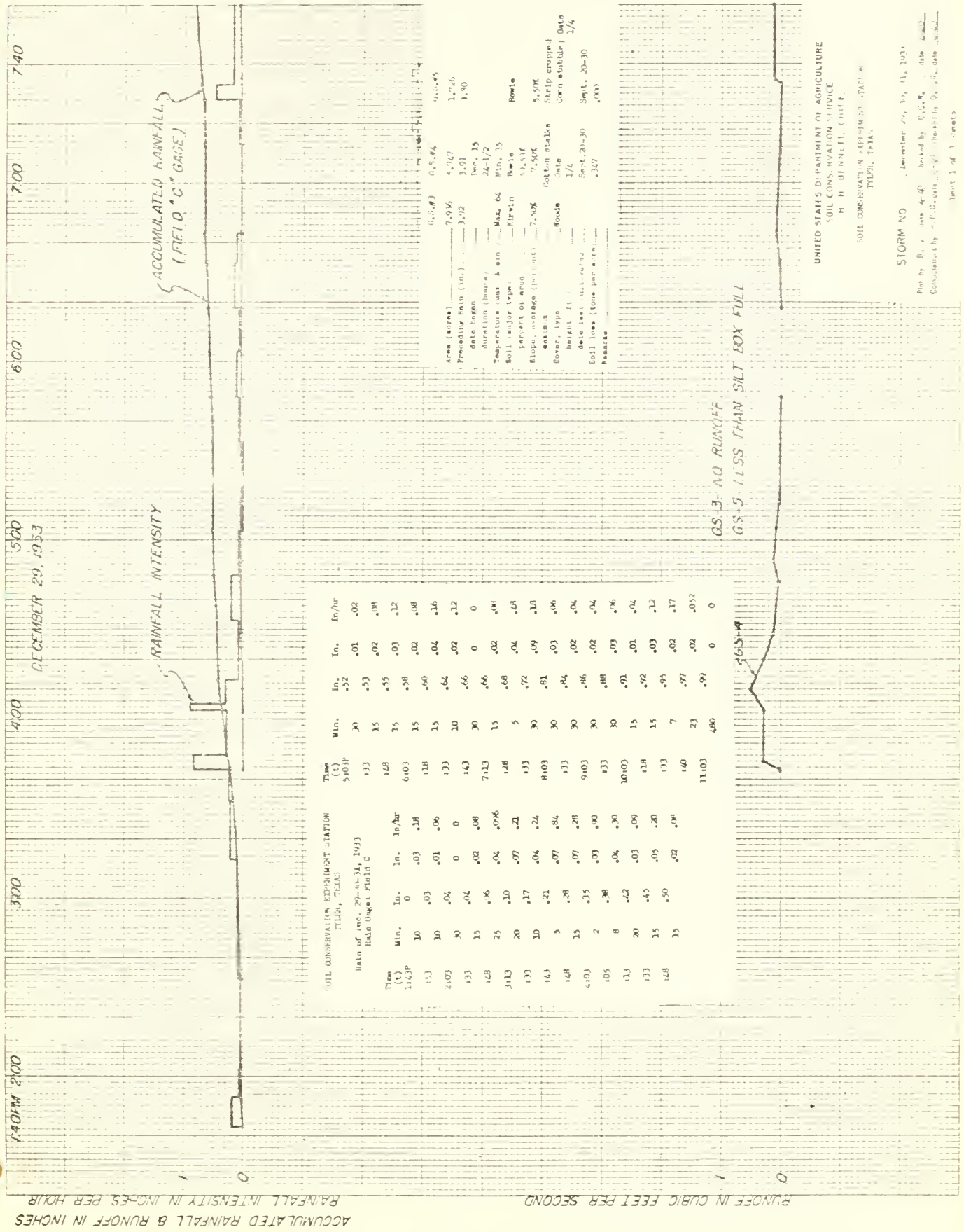
Sheet 2 of 2











ACCUMULATED RAINFALL & RUNOFF IN INCHES  
RAINFALL INTENSITY IN INCHES PER HOUR

RUNOFF IN CUBIC FEET PER SECOND

SOIL OBSERVATION EXPERIMENT STATION  
TYLER, TEXAS

Rain of Dec. 29-31, 1953  
Rain Gage Field C

Time (h)	Min.	In.	In/hr	Min.	In.	In.	In/hr
1400	0	0	0	30	.52	.01	.02
1430	10	.03	.18	35	.53	.02	.08
1500	20	.04	.06	40	.55	.03	.12
1530	30	.04	0	45	.58	.02	.08
1600	40	.04	.02	50	.60	.04	.16
1630	50	.06	.04	55	.64	.02	.12
1700	60	.10	.07	60	.66	0	0
1730	70	.12	.04	65	.66	.02	.08
1800	80	.14	.06	70	.68	.04	.16
1830	90	.16	.08	75	.72	.09	.18
1900	100	.18	.10	80	.81	.01	.06
1930	110	.20	.12	85	.84	.02	.04
2000	120	.22	.14	90	.86	.02	.04
2030	130	.24	.16	95	.88	.03	.06
2100	140	.26	.18	100	.91	.01	.04
2130	150	.28	.20	105	.92	.03	.12
2200	160	.30	.22	110	.95	.02	.17
2230	170	.32	.24	115	.97	.02	.052
2300	180	.34	.26	120	.99	0	0
2330	190	.36	.28	125			
2400	200	.38	.30				
2430	210	.40	.32				
2500	220	.42	.34				
2530	230	.44	.36				
2600	240	.46	.38				
2630	250	.48	.40				
2700	260	.50	.42				
2730	270	.52	.44				
2800	280	.54	.46				
2830	290	.56	.48				
2900	300	.58	.50				
2930	310	.60	.52				
3000	320	.62	.54				
3030	330	.64	.56				
3100	340	.66	.58				
3130	350	.68	.60				
3200	360	.70	.62				
3230	370	.72	.64				
3300	380	.74	.66				
3330	390	.76	.68				
3400	400	.78	.70				
3430	410	.80	.72				
3500	420	.82	.74				
3530	430	.84	.76				
3600	440	.86	.78				
3630	450	.88	.80				
3700	460	.90	.82				
3730	470	.92	.84				
3800	480	.94	.86				
3830	490	.96	.88				
3900	500	.98	.90				
3930	510	.99	.92				
4000	520	1.00	.94				
4030	530	1.01	.96				
4100	540	1.02	.98				
4130	550	1.03	1.00				
4200	560	1.04	1.02				
4230	570	1.05	1.04				
4300	580	1.06	1.06				
4330	590	1.07	1.08				
4400	600	1.08	1.10				
4430	610	1.09	1.12				
4500	620	1.10	1.14				
4530	630	1.11	1.16				
4600	640	1.12	1.18				
4630	650	1.13	1.20				
4700	660	1.14	1.22				
4730	670	1.15	1.24				
4800	680	1.16	1.26				
4830	690	1.17	1.28				
4900	700	1.18	1.30				
4930	710	1.19	1.32				
5000	720	1.20	1.34				
5030	730	1.21	1.36				
5100	740	1.22	1.38				
5130	750	1.23	1.40				
5200	760	1.24	1.42				
5230	770	1.25	1.44				
5300	780	1.26	1.46				
5330	790	1.27	1.48				
5400	800	1.28	1.50				
5430	810	1.29	1.52				
5500	820	1.30	1.54				
5530	830	1.31	1.56				
5600	840	1.32	1.58				
5630	850	1.33	1.60				
5700	860	1.34	1.62				
5730	870	1.35	1.64				
5800	880	1.36	1.66				
5830	890	1.37	1.68				
5900	900	1.38	1.70				
5930	910	1.39	1.72				
6000	920	1.40	1.74				
6030	930	1.41	1.76				
6100	940	1.42	1.78				
6130	950	1.43	1.80				
6200	960	1.44	1.82				
6230	970	1.45	1.84				
6300	980	1.46	1.86				
6330	990	1.47	1.88				
6400	1000	1.48	1.90				
6430	1010	1.49	1.92				
6500	1020	1.50	1.94				
6530	1030	1.51	1.96				
6600	1040	1.52	1.98				
6630	1050	1.53	2.00				
6700	1060	1.54	2.02				
6730	1070	1.55	2.04				
6800	1080	1.56	2.06				
6830	1090	1.57	2.08				
6900	1100	1.58	2.10				
6930	1110	1.59	2.12				
7000	1120	1.60	2.14				
7030	1130	1.61	2.16				
7100	1140	1.62	2.18				
7130	1150	1.63	2.20				
7200	1160	1.64	2.22				
7230	1170	1.65	2.24				
7300	1180	1.66	2.26				
7330	1190	1.67	2.28				
7400	1200	1.68	2.30				

Area (acres) 7.96  
Preceding Rain (in.) 3.92  
Date begun Dec. 15  
Duration (hours) 24-1/2  
Temperature air & soil Max. 64 Min. 35  
Soil major type Mire  
Percent of area Mire 100  
Slope average (per cent) 7.58  
Cover, type Shrub  
Height ft 1/4  
Date last cultivated Sept. 20-30  
Soil loss (tons per acre) 327  
Remarks

GS-3- NO RUNOFF  
GS-5- LESS THAN SALT BOX FULL

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BINNETT, Chief  
SOIL CONSERVATION EXPERIMENT STATION  
TYLER, TEXAS

STORM NO. December 29, 1953  
Plot by R. & date 4-4-54 based by O. G. M. date 6-2-54  
Computation by A. J. G. date 1-1-55 based by O. G. M. date 6-2-54  
Sheet 1 of 3 sheets





ACCUMULATED RAINFALL & RUNOFF IN INCHES

RUNOFF IN CUBIC FEET PER SECOND

8:00 PM

9:00

DECEMBER 20, 1933

10:00

7:00 AM

8:00

DECEMBER 30, 1933

9:00

10:00

2

1

0

ACCUMULATED RAINFALL  
(FIELD "G" GAGE)

RAINFALL INTENSITY

SOIL CONSERVATION EXPERIMENT STATION

WILLIAMS, TEXAS

Basin of Dec. 30, 1933

Basin Gages: Field C

Time (t)	Min.	In.	In./hr	Min.	In.	In./hr
7:00 AM	60	.99	.02	25	1.40	0
8:00	30	1.01	.03	5	1.41	.01
9:00	30	1.04	.05	23	1.41	0
10:00	30	1.09	.10	7	1.43	.02
11:00	30	1.23	.14	20	1.43	.01
12:00	30	1.25	.03	35	1.44	0
1:00	30	1.28	.09	5	1.44	.02
2:00	30	1.37	.02	123	1.46	.01
3:00	30	1.39	0	5	1.47	.04
4:00	30	1.39	.01	5	1.51	.12
5:00	30	1.39	.01	5	1.53	.12
6:00	30	1.39	.01	10	1.53	.02
7:00	30	1.39	.01	148	1.55	.03
8:00	30	1.39	.01	15	1.58	0
9:00	30	1.39	.01	946	1.64	0
10:00	30	1.39	.01	6,371	1.64	.02
11:00	30	1.39	.01	8,034	1.70	.03
12:00	30	1.39	.01			

65.4

65.4

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT CHIEF

SOIL ONE WATCH EXPERIMENT STATION  
WILLIAMS, TEXAS

STORM NO. 10 December 20, 21, 22, 1933

Record by date 12/20 checked by G. H. B. date 12/20  
Computations by J. P. C. date 12/20 checked by G. H. B. date 12/20

Sheet 1 of 3 Sheets



ACCUMULATED RAINFALL & RUNOFF IN INCHES  
RAINFALL INTENSITY IN INCHES PER HOUR

MINUTE IN CUBIC FEET PER SECOND

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT, CHIEF.  
SOIL CONSERVATION DISTRICT STATION  
DALLAS, TEXAS.

10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 8









UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 Month Jan. & Feb., 1934  
 Sheet 1 of 6 RKMTB

 Project SCS Experiment Station, Taylor, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date       | Watershed |              | Rainfall   |                    | Temperature     |                           | Runoff          |              | Harvest, Minus (bushels) | Dry Land (bushels per acre) | Condition of Watershed                                            |
|------------|-----------|--------------|------------|--------------------|-----------------|---------------------------|-----------------|--------------|--------------------------|-----------------------------|-------------------------------------------------------------------|
|            | Number    | Area (acres) | Onset N.S. | Duration (minutes) | Amount (inches) | Maximum (inches per hour) | Amount (inches) | Peak (hours) | Time                     |                             |                                                                   |
| (1)        | (2)       | (3)          | (4)        | (5)                | (6)             | (7)                       | (8)             | (9)          | (10)                     | (11)                        | (12)                                                              |
| 1934       | 3         | 7,936        | 2-1-PB     |                    |                 |                           |                 |              |                          |                             |                                                                   |
| Jan. 3     | 4         | 5,747        | 1-P-C      | 810                | 1.41            | .36                       | .44             | 7:46 AM      | 8:16 AM                  | 1,498                       | Woods (oak); dormant                                              |
|            | 5         | 1,726        | 3-F-A      |                    | 1.39            |                           |                 | 7:46 AM      | 8:10 AM                  | 1,217                       | On 3" high in cotton stalks                                       |
| Jan. 7-8   | 3         | 7,936        | 2          |                    | .12             |                           | .08             |              |                          | 1,047                       | Strip cropped; on 40% corn stubble 60%; bermuda grass in patches. |
|            | 4         | 5,747        | 1          | 705                | .13             |                           |                 |              |                          |                             | Woods (oak); dormant                                              |
|            | 5         | 1,726        | 3          |                    | .11             |                           |                 |              |                          |                             | On 3" good; cotton stalks                                         |
| Jan. 11-12 | 3         | 7,936        | 2          |                    | .16             |                           | .08             |              |                          |                             | On 3" good; cotton stalks                                         |
|            | 4         | 5,747        | 1          | 693                | .15             |                           |                 |              |                          |                             | On 3" good; cotton stalks                                         |
|            | 5         | 1,726        | 3          |                    | .15             |                           |                 |              |                          |                             | On 3" good; cotton stalks                                         |
| Jan. 18    | 3         | 7,936        | 2          |                    | .74             |                           | .20             |              |                          |                             | On 3" good; cotton stalks                                         |
|            | 4         | 5,747        | 1          | 510                | .70             |                           |                 |              |                          |                             | On 3" good; cotton stalks                                         |
|            | 5         | 1,726        | 3          |                    | .70             |                           |                 |              |                          |                             | On 3" good; cotton stalks                                         |
| Jan. 31    | 3         | 7,936        | 2          |                    | .51             |                           | .12             |              |                          |                             | On 3" good; cotton stalks                                         |
|            | 4         | 5,747        | 1          | 975                | .52             |                           |                 |              |                          |                             | On 3" good; cotton stalks                                         |
|            | 5         | 1,726        | 3          |                    | .60             |                           |                 |              |                          |                             | On 3" good; cotton stalks                                         |
| Feb. 7-8-9 | 3         | 7,936        | 2          |                    | 1.42            |                           | .60             |              |                          |                             | On 3" good; cotton stalks                                         |
|            | 4         | 5,747        | 1          | 2560               | 1.21            |                           |                 |              |                          |                             | On 3" good; cotton stalks                                         |
|            | 5         | 1,726        | 3          |                    | 1.31            |                           |                 |              |                          |                             | On 3" good; cotton stalks                                         |
| Feb. 11    | 3         | 7,936        | 2          |                    | .37             |                           | .16             |              |                          |                             | On 3" good; cotton stalks                                         |
|            | 4         | 5,747        | 1          | 675                | .32             |                           |                 |              |                          |                             | On 3" good; cotton stalks                                         |
|            | 5         | 1,726        | 3          |                    | .33             |                           |                 |              |                          |                             | On 3" good; cotton stalks                                         |
| Feb. 18    | 3         | 7,936        | 2          |                    | 1.08            |                           | 1.44            |              |                          |                             | On 3" good; cotton stalks                                         |
|            | 4         | 5,747        | 1          | 87                 | .99             |                           |                 |              |                          |                             | On 3" good; cotton stalks                                         |
|            | 5         | 1,726        | 3          |                    | .98             |                           |                 |              |                          |                             | On 3" good; cotton stalks                                         |
| Feb. 25    | 3         | 7,936        | 2          |                    | .41             |                           | 1.44            |              |                          |                             | On 3" good; cotton stalks                                         |
|            | 4         | 5,747        | 1          | 75                 | .40             |                           |                 |              |                          |                             | On 3" good; cotton stalks                                         |
|            | 5         | 1,726        | 3          |                    | .40             |                           |                 |              |                          |                             | On 3" good; cotton stalks                                         |



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH Feb. Mar. & Apr., 19 34  
 SHEET 2 OF 6 SHEETS

 PROPERTY, 808 Experiment Station, Tyler, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date       | WATERGAGE |              |         | RAINFALL    |                     |                 |                             |                              | TEMPERATURE (degrees F)      |                           |         | HURD-OFF  |                 |             | RAINFALL MEANS (inches) | Rise Loss (feet per acre) | COMMENTS OF WATERSHED           |
|------------|-----------|--------------|---------|-------------|---------------------|-----------------|-----------------------------|------------------------------|------------------------------|---------------------------|---------|-----------|-----------------|-------------|-------------------------|---------------------------|---------------------------------|
|            | Number    | Area (acres) | Use No. | Time (hour) | Direction (azimuth) | Amount (inches) | 5 minutes (inches per hour) | 15 minutes (inches per hour) | 30 minutes (inches per hour) | Maximum (inches per hour) | Minimum | Time (hr) | Amount (inches) | On ft. sec. | Time                    |                           |                                 |
| 1934       | (1)       | (2)          | (3)     | (4)         | (5)                 | (6)             | (7)                         | (8)                          | (9)                          | (10)                      | (11)    | (12)      | (13)            | (14)        | (15)                    | (16)                      | (17)                            |
| Feb. 28    | 3         | 7.936        | 2-F-24  |             |                     |                 |                             |                              |                              |                           | 40-53   | 32-48     | 1/110P          | .547        | 1/30                    | 3:15P                     | 2.683                           |
|            | 4         | 5.747        | 1-E-C   | 9:22AM      | 2861                | 3.30            |                             |                              |                              |                           | 40-53   | 32-48     | 1/10:23A        | .456        | 1/2:48                  | 1:41P                     | 2.344                           |
|            | 5         | 1.726        | 3-E-A   |             |                     | 3.23            |                             |                              |                              |                           | 40-53   | 32-48     | 1/10:10A        | 2.179       | 1/66                    | 1:49P                     | 1.051                           |
| Mar. 3-4   | 3         | 7.936        | 2       |             |                     | .59             |                             |                              |                              |                           | 69-65   | 40-48     | 3/12:59PM       | .219        | 2/10                    | 12:59A                    | .371                            |
|            | 4         | 5.747        | 1       | 10:31PM     | 555                 | .49             |                             |                              |                              |                           | 69-65   | 40-48     | 11:10P          | .090        |                         | 11:25PM                   | .390                            |
|            | 5         | 1.726        | 3       |             |                     | .19             |                             |                              |                              |                           | 69-65   | 40-48     | 11:13P          | .178        |                         | 11:35PM                   | .171                            |
| Mar. 10    | 3         | 7.936        | 2       |             |                     | .12             |                             |                              |                              |                           | 76      | 28        | NRO             |             |                         |                           | Woods; beginning to bud         |
|            | 4         | 5.747        | 1       | 6:38AM      | 50                  | .11             |                             |                              |                              |                           | 76      | 28        | NRO             |             |                         |                           | Plowed late in Feb.; bare       |
|            | 5         | 1.726        |         |             |                     | .18             |                             |                              |                              |                           | 76      | 28        | NRO             |             |                         |                           | Oats; corn stubble; bermuda     |
| Mar. 24-25 | 3         | 7.936        | 2       |             |                     | 4.43            |                             |                              |                              |                           | 75-41   | 40-37     | 10:32A          | .683        |                         |                           | Woods (oaks) budding            |
|            | 4         | 5.747        | 1       | 10:54AM     | 2240                | 3.69            |                             |                              |                              |                           | 75-41   | 40-37     | 8:27A           | 1.358       |                         |                           | Plowed recently; bare           |
|            | 5         | 1.726        | 3       |             |                     | 3.82            |                             |                              |                              |                           | 75-41   | 40-37     | 8:36A           | 1.443       |                         |                           | Oats 9"; corn stubble; bermuda  |
| April 5    | 3         | 7.936        | 2       |             |                     | 3.33            |                             |                              |                              |                           | 81-78   | 69-58     | 2:07A           | .561        |                         |                           | Woods (oaks) putting on leaves  |
|            | 4         | 5.747        | 1       | 12:55AM     | 430                 | 2.91            |                             |                              |                              |                           | 81-78   | 69-58     | 1:04A           | 2.119       |                         |                           | Plowed recently; bare           |
|            | 5         | 1.726        | 3       |             |                     | 3.20            |                             |                              |                              |                           | 81-78   | 69-58     | 1:08A           | 1.844       |                         |                           | Oats 9"; corn stubble; bermuda  |
| April 5-6  | 3         | 7.936        | 2       |             |                     | 1.28            |                             |                              |                              |                           | 78      | 58        | 6/11:08P        | .936        |                         |                           | Oats putting on leaves          |
|            | 4         | 5.747        | 1       | 8:55PM      | 665                 | 1.66            |                             |                              |                              |                           | 78      | 58        | 10:43P          | 1.020       |                         |                           | Plowed recently; bare           |
|            | 5         | 1.726        | 3       |             |                     | 1.20            |                             |                              |                              |                           | 78      | 58        | 8:57P           | 1.025       |                         |                           | Oats 9"; corn stubble; bermuda  |
| April 6-7  | 3         | 7.936        | 2       |             |                     | .09             |                             |                              |                              |                           | 75      | 57        | NRO             |             |                         |                           | Oats in leaf                    |
|            | 4         | 5.747        | 1       | 10:30PM     | 270                 | .09             |                             |                              |                              |                           | 75      | 57        | NRO             |             |                         |                           | Plowed recently; bare           |
|            | 5         | 1.726        | 3       |             |                     | .09             |                             |                              |                              |                           | 75      | 57        | NRO             |             |                         |                           | Oats 9"; corn stubble; bermuda  |
| April 16   | 3         | 7.936        | 2       |             |                     | .77             |                             |                              |                              |                           | 77      | 58        | NRO             |             |                         |                           | Oats about full foliage         |
|            | 4         | 5.747        | 1       | 1:38AM      | 162                 | .69             |                             |                              |                              |                           | 77      | 58        | 5:11 box        | .012        | No rate                 |                           | Oats disked for planting        |
|            | 5         | 1.726        | 3       |             |                     | .02             |                             |                              |                              |                           | 77      | 58        | 5:11 box        | .055        | No rate                 |                           | Oats 10"; corn stubble; bermuda |
| April 18   | 3         | 7.936        | 2       |             |                     | .04             |                             |                              |                              |                           | 81      | 60        | NRO             |             |                         |                           | Woods (oaks)                    |
|            | 4         | 5.747        | 1       | 1:55AM      | 60                  | .04             |                             |                              |                              |                           | 81      | 60        | NRO             |             |                         |                           | Plowed recently; bare           |
|            | 5         | 1.726        | 3       |             |                     | .04             |                             |                              |                              |                           | 81      | 60        | NRO             |             |                         |                           | Oats 9"; corn stubble; bermuda  |





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 Month Apr. May & June, 1934  
 Sheet 3 of 6 SHEETS

 Project 268 Experiment Station, Tyler, Texas RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date        | Watershed |              |          | Rainfall     |                    |                 |                             |                              | Thunderstorms (lines 7-9)    |         |              | Rise-off      |                 |                  |         | Rainfall Means (inches) | Rise Low (feet per sec) | Condition of Watershed                                                                                       |
|-------------|-----------|--------------|----------|--------------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|---------|--------------|---------------|-----------------|------------------|---------|-------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------|
|             | Number    | Area (acres) | Gage No. | Begin (hour) | Duration (minutes) | Amount (inches) | Maximum Intensity           |                              |                              | Minimum | Begin (hour) | Period (hour) | Amount (inches) | Maximum Rate     |         |                         |                         |                                                                                                              |
|             |           |              |          |              |                    |                 | 4 minutes (inches per hour) | 10 minutes (inches per hour) | 30 minutes (inches per hour) |         |              |               |                 | No. ft. per sec. | Time    |                         |                         |                                                                                                              |
| 1934        | (8)       | (3)          | (4)      | (5)          | (6)                | (7)             | (8)                         | (9)                          | (10)                         | (11)    | (12)         | (13)          | (14)            | (15)             | (16)    | (17)                    | (18)                    | (19)                                                                                                         |
| April 19    | 3         | 7.936        | 2-F-FB   |              |                    | .23             |                             |                              |                              | 75      | 61           | NRO           |                 |                  |         |                         |                         | Woods (oaks)<br>Corn recently planted<br>Strip cropped; oats 40%; corn stubble 60%; bermuda grass in wailes. |
|             | 4         | 5.747        | 1-F-C    | 2:55AM       | 170                | .20             | .16                         |                              | .12                          | 75      | 61           | NRO           |                 |                  |         |                         |                         | Woods (oaks)<br>Corn 2", poor stand<br>11" oats; corn stubble; bermuda                                       |
|             | 5         | 1.726        | 3-F-A    |              |                    | .22             |                             |                              |                              | 75      | 61           | NRO           |                 |                  |         |                         |                         |                                                                                                              |
| April 24    | 3         | 7.936        | 2        |              |                    | *               |                             |                              |                              | 85      | 60           | NRO           |                 |                  |         |                         |                         |                                                                                                              |
|             | 4         | 5.747        | 1        | 5:10AM       | 150                | .03             | .04                         |                              | .04                          | 85      | 60           | NRO           |                 |                  |         |                         |                         |                                                                                                              |
|             | 5         | 1.726        | 3        |              |                    | *               |                             |                              |                              | 85      | 60           | NRO           |                 |                  |         |                         |                         |                                                                                                              |
| April 24-25 | 3         | 7.936        | 2        |              |                    | 1.29            |                             |                              |                              | 85-73   | 60-59        | NRO           |                 |                  |         |                         |                         | Woods<br>Corn poor stand<br>Oats; corn stubble; bermuda                                                      |
|             | 4         | 5.747        | 1        | 2:55PM       | 1075               | 1.20            | 2.00                        |                              | 1.18                         | 85-73   | 60-59        | 3:05PM        | 9:15PM          | .239             | 9:07    | 8:26PM                  | 6.271                   |                                                                                                              |
|             | 5         | 1.726        | 3        |              |                    | 1.02            |                             |                              |                              | 85-73   | 60-59        | 2:59PM        | 8:44PM          | .192             | .93     | 3:06PM                  | .000                    |                                                                                                              |
| April 27    | 3         | 7.936        | 2        |              |                    | .05             |                             |                              |                              | 80      | 55           | NRO           |                 |                  |         |                         |                         | Woods<br>Corn poor stand<br>Oats; corn stubble; bermuda                                                      |
|             | 4         | 5.747        | 1        | 11:05AM      | 8                  | .09             | .36                         |                              | .18                          | 80      | 55           | NRO           |                 |                  |         |                         |                         |                                                                                                              |
|             | 5         | 1.726        | 3        |              |                    | .12             |                             |                              |                              | 80      | 55           | NRO           |                 |                  |         |                         |                         |                                                                                                              |
| May 4       | 3         | 7.936        | 2        |              |                    | .55             |                             |                              |                              | 86      | 65           | NRO           |                 |                  |         |                         |                         | Woods<br>Corn 4" poor; cultivated<br>Oats 1 1/2 corn stubble; bermuda                                        |
|             | 4         | 5.747        | 1        | 11:09PM      | 145                | .54             | .72                         |                              | .60                          | 86      | 65           | Silt box      |                 | .016             | No rate | 0.524                   | .078                    |                                                                                                              |
|             | 5         | 1.726        | 3        |              |                    | .55             |                             |                              |                              | 86      | 65           | NRO           |                 |                  |         |                         |                         |                                                                                                              |
| May 23-24   | 3         | 7.936        | 2        |              |                    | .20             |                             |                              |                              | 88-83   | 65-67        | NRO           |                 |                  |         |                         |                         | Woods<br>Corn thinned, cultivated<br>Plowed and disked (May 9th)<br>Cotton & sorghum strips planted          |
|             | 4         | 5.747        | 1        | 12:14PM      | 1255               | .17             | .08                         |                              | .06                          | 88-83   | 65-67        | NRO           |                 |                  |         |                         |                         |                                                                                                              |
|             | 5         | 1.726        | 3        |              |                    | .26             |                             |                              |                              | 88-83   | 65-67        | NRO           |                 |                  |         |                         |                         |                                                                                                              |
| May 24      | 3         | 7.936        | 2        |              |                    | .26             |                             |                              |                              | 83      | 67           | NRO           |                 |                  |         |                         |                         | Woods<br>Corn 30"<br>Cotton; not up; sorghum                                                                 |
|             | 4         | 5.747        | 1        | 7:40PM       | 93                 | .30             | .60                         |                              | .42                          | 83      | 67           | NRO           |                 |                  |         |                         |                         |                                                                                                              |
|             | 5         | 1.726        | 3        |              |                    | .34             |                             |                              |                              | 83      | 67           | NRO           |                 |                  |         |                         |                         |                                                                                                              |
| June 11     | 3         | 7.936        | 2        |              |                    | .57             |                             |                              |                              | 94      | 64           | NRO           |                 |                  |         |                         |                         | Woods<br>Corn, cultivated<br>Cotton just up; sorghum                                                         |
|             | 4         | 5.747        | 1        | 11:09AM      | 25                 | .53             | 1.76                        |                              | 1.06                         | 94      | 64           | NRO           |                 |                  |         |                         |                         |                                                                                                              |
|             | 5         | 1.726        | 3        |              |                    | .50             |                             |                              |                              | 94      | 64           | NRO           |                 |                  |         |                         |                         |                                                                                                              |
| June 12     | 3         | 7.936        | 2        |              |                    | 1.01            |                             |                              |                              | 88      | 64           | NRO           |                 |                  |         |                         |                         | Woods<br>Corn, poor stand<br>Cotton; sorghum strips                                                          |
|             | 4         | 5.747        | 1        | 2:20AM       | 275                | .86             | 1.36                        |                              | 1.02                         | 88      | 64           | Silt box      |                 | .002             | No rate | 0.458                   | .047                    |                                                                                                              |
|             | 5         | 1.726        | 3        |              |                    | .84             |                             |                              |                              | 88      | 64           | NRO           |                 |                  |         |                         |                         |                                                                                                              |

Combined with succeeding rain

• Combined with succeeding rain





UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
DIVISION OF RESEARCH

Month June, Jul., Aug., & Sept., 19 34  
SHEET 4 OF 6 SHEETS

Project 803 Experiment Station, Tyler, Texas RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date     | WATERSHED |                 |           | RAINFALL              |                    |                                |                                 |                                 | TEMPERATURES<br>(degrees F.) |         |                    | RUN-OFF           |             |         |      | RAINFALL MINUS<br>LOSSES<br>(inches) | NET LOSS<br>(acre feet) | CONDITION OF WATERSHED                                                                         |
|----------|-----------|-----------------|-----------|-----------------------|--------------------|--------------------------------|---------------------------------|---------------------------------|------------------------------|---------|--------------------|-------------------|-------------|---------|------|--------------------------------------|-------------------------|------------------------------------------------------------------------------------------------|
|          | Number    | Area<br>(acres) | Onset h-m | Duration<br>(minutes) | Amount<br>(inches) | MAXIMUM INTENSITY              |                                 |                                 | Maximum                      | Minimum | Hourly<br>(inches) | Total<br>(inches) | On ft. sec. | Time    |      |                                      |                         |                                                                                                |
|          |           |                 |           |                       |                    | 8 minutes<br>(inches per hour) | 15 minutes<br>(inches per hour) | 30 minutes<br>(inches per hour) |                              |         |                    |                   |             |         |      |                                      |                         |                                                                                                |
| 1934     | (1)       | (2)             | (3)       | (4)                   | (5)                | (6)                            | (7)                             | (8)                             | (9)                          | (10)    | (11)               | (12)              | (13)        | (14)    | (15) | (16)                                 | (17)                    | (18)                                                                                           |
| June 30  | 3         | 7.936           | 2-7-7b    |                       |                    |                                | .06                             |                                 | .48                          | .14     | 95                 | NRO               |             |         |      |                                      |                         | Woods<br>Corn, 5'-6", poor stand<br>Strip cropped, cotton 1'-2"<br>Cultivated in June; Sorghum |
|          | 4         | 5.747           | 1-F-C     | 12                    |                    |                                | .07                             |                                 |                              |         | 95                 | NRO               |             |         |      |                                      |                         |                                                                                                |
|          | 5         | 1.726           | 3-F-A     |                       |                    |                                | .07                             |                                 |                              |         | 95                 | NRO               |             |         |      |                                      |                         |                                                                                                |
| July 2   | 3         | 7.936           | 2         |                       |                    |                                | .33                             |                                 |                              |         | 97                 | NRO               |             |         |      |                                      |                         | Woods<br>Corn, 5'-6"<br>Cotton 6"-14" cultivated in<br>July; Sorghum                           |
|          | 4         | 5.747           | 1         | 7:50 PM               | 36                 |                                | .26                             |                                 | .96                          | .50     | 97                 | NRO               |             |         |      |                                      |                         |                                                                                                |
|          | 5         | 1.726           | 3         |                       |                    |                                | .19                             |                                 |                              |         | 97                 | NRO               |             |         |      |                                      |                         |                                                                                                |
| July 22  | 3         | 7.936           | 2         |                       |                    |                                | .05                             |                                 |                              |         | 98                 | NRO               |             |         |      |                                      |                         | Woods<br>Corn 5'-6"<br>Cotton 10"-24", Sorghum                                                 |
|          | 4         | 5.747           | 1         | 6:20 PM               | 6                  |                                | .13                             |                                 | 1.32                         | .26     | 98                 | NRO               |             |         |      |                                      |                         |                                                                                                |
|          | 5         | 1.726           | 3         |                       |                    |                                | .19                             |                                 |                              |         | 98                 | NRO               |             |         |      |                                      |                         |                                                                                                |
| July 24  | 3         | 7.936           | 2         |                       |                    |                                |                                 |                                 | .72                          | .12     | 103                | NRO               |             |         |      |                                      |                         | Woods<br>Corn, 5'-6"<br>Cotton 10"-24", Sorghum                                                |
|          | 4         | 5.747           | 1         | 5:00 PM               | 5                  |                                | .06                             |                                 |                              |         | 103                | NRO               |             |         |      |                                      |                         |                                                                                                |
|          | 5         | 1.726           | 3         |                       |                    |                                | .06                             |                                 |                              |         | 103                | NRO               |             |         |      |                                      |                         |                                                                                                |
| Aug. 9   | 3         | 7.936           | 2         |                       |                    |                                | .17                             |                                 |                              |         | 102                | NRO               |             |         |      |                                      |                         | Woods<br>Corn, 5'-6"<br>Cotton 18"-24", Sorghum                                                |
|          | 4         | 5.747           | 1         | 3:58 PM               | 95                 |                                | .17                             |                                 | .60                          | .20     | 102                | NRO               |             |         |      |                                      |                         |                                                                                                |
|          | 5         | 1.726           | 3         |                       |                    |                                | .18                             |                                 |                              |         | 102                | NRO               |             |         |      |                                      |                         |                                                                                                |
| Aug. 14  | 3         | 7.936           | 2         |                       |                    |                                | .55                             |                                 |                              |         | 100                | NRO               |             |         |      |                                      |                         | Woods<br>Corn, 5'-6"<br>Cotton 20"-28", Sorghum                                                |
|          | 4         | 5.747           | 1         | 5:34 PM               | 30                 |                                | .48                             |                                 | 3.60                         | .96     | 100                | Silt box          | .031        | No rate |      | .043                                 |                         |                                                                                                |
|          | 5         | 1.726           | 3         |                       |                    |                                | .53                             |                                 |                              |         | 100                | NRO               |             |         |      |                                      |                         |                                                                                                |
| Aug. 28  | 3         | 7.936           | 2         |                       |                    |                                | .08                             |                                 |                              |         | 93                 | NRO               |             |         |      |                                      |                         | Woods<br>Corn, 5'-6"<br>Cotton 24"-30", Sorghum                                                |
|          | 4         | 5.747           | 1         | 1:45 PM               | 15                 |                                | .06                             |                                 | .48                          | .12     | 93                 | NRO               |             |         |      |                                      |                         |                                                                                                |
|          | 5         | 1.726           | 3         |                       |                    |                                | .06                             |                                 |                              |         | 93                 | NRO               |             |         |      |                                      |                         |                                                                                                |
| Sept. 3  | 3         | 7.936           | 2         |                       |                    |                                | .52                             |                                 |                              |         | 93                 | NRO               |             |         |      |                                      |                         | Woods<br>Corn, 5'-6"<br>Cotton, 24"-30", Sorghum                                               |
|          | 4         | 5.747           | 1         | 4:18 AM               | 288                |                                | .51                             |                                 | .72                          | .26     | 93                 | NRO               |             |         |      |                                      |                         |                                                                                                |
|          | 5         | 1.726           | 3         |                       |                    |                                | .54                             |                                 |                              |         | 93                 | NRO               |             |         |      |                                      |                         |                                                                                                |
| Sept. 14 | 3         | 7.936           | 2         |                       |                    |                                | .96                             |                                 |                              |         | 89                 | NRO               |             |         |      |                                      |                         | Woods<br>Corn, 5'-6"<br>Cotton 24"-30", Sorghum                                                |
|          | 4         | 5.747           | 1         | 7:37 AM               | 227                |                                | .90                             |                                 | 2.52                         | 1.38    | 89                 | NRO               |             |         |      |                                      |                         |                                                                                                |
|          | 5         | 1.726           | 3         |                       |                    |                                | .82                             |                                 |                              |         | 89                 | NRO               |             |         |      |                                      |                         |                                                                                                |



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 Month Sept. & Nov., 19 34  
 Sheet 5 OF 6 SHEETS

 PROJECT 568 Experiment Station, Tyler, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date       | WATERSHED |                 | RAINFALL        |                  |                        |                    |                             | TEMPERATURES<br>(degrees F)  |                  |                  | STORMS             |              |      |         | Rainfall Means<br>(inches) | Rise from<br>(time per acre) | CONDITION OF WATERSHED |
|------------|-----------|-----------------|-----------------|------------------|------------------------|--------------------|-----------------------------|------------------------------|------------------|------------------|--------------------|--------------|------|---------|----------------------------|------------------------------|------------------------|
|            | Number    | Area<br>(acres) | Days No.<br>(4) | Begin<br>(hours) | Duration<br>(in hours) | Amount<br>(inches) | MAX. WIND VELOCITY          |                              | Hours<br>(hours) | Fried<br>(hours) | Amount<br>(inches) | Maximum Rate |      |         |                            |                              |                        |
|            |           |                 |                 |                  |                        |                    | 5 miles<br>(hours per hour) | 10 miles<br>(hours per hour) |                  |                  |                    | No. Hrs.     | Time |         |                            |                              |                        |
| 1934       | (1)       | (2)             | (3)             | (5)              | (6)                    | (7)                | (8)                         | (9)                          | (10)             | (11)             | (12)               | (13)         | (14) | (15)    | (16)                       | (17)                         | (18)                   |
| Sept. 21   | 3         | 7.936           | 2-7-7b          |                  |                        | .50                |                             |                              |                  | 63               | NHO                |              |      |         |                            |                              |                        |
|            | 4         | 5.747           | 1-F-C           | 280              |                        | .51                | .36                         | .32                          | .24              | 89               | NHO                |              |      |         |                            |                              |                        |
|            | 5         | 1.726           | 3-F-A           |                  |                        | .51                |                             |                              |                  | 89               | NHO                |              |      |         |                            |                              |                        |
| Sept. 28   | 3         | 7.936           | 2               |                  |                        | .22                |                             |                              |                  | 84               | NHO                |              |      |         |                            |                              |                        |
|            | 4         | 5.747           | 1               | 2:47PM           | 25                     | .28                | 1.68                        | .96                          | .56              | 84               | NHO                |              |      |         |                            |                              |                        |
|            | 5         | 1.726           | 3               |                  |                        | .25                |                             |                              |                  | 84               | NHO                |              |      |         |                            |                              |                        |
| Sept. 29   | 3         | 7.936           | 2               |                  |                        | .03                |                             |                              |                  | 85               | NHO                |              |      |         |                            |                              |                        |
|            | 4         | 5.747           | 1               | 9:05PM           | 82                     | .10                | .60                         | .32                          | .16              | 85               | NHO                |              |      |         |                            |                              |                        |
|            | 5         | 1.726           | 3               |                  |                        | .14                |                             |                              |                  | 85               | NHO                |              |      |         |                            |                              |                        |
| Oct. 14    | 3         | 7.936           | 2               |                  |                        | .34                |                             |                              |                  | 83               | NHO                |              |      |         |                            |                              |                        |
|            | 4         | 5.747           | 1               | 7:45PM           | 163                    | .37                | .60                         | .44                          | .26              | 83               | NHO                |              |      |         |                            |                              |                        |
|            | 5         | 1.726           | 3               |                  |                        | .39                |                             |                              |                  | 83               | NHO                |              |      |         |                            |                              |                        |
| Nov. 2     | 3         | 7.936           | 2               |                  |                        | .59                |                             |                              |                  | 80               | NHO                |              |      |         |                            |                              |                        |
|            | 4         | 5.747           | 1               | 5:00PM           | 265                    | .58                | .72                         | .52                          | .40              | 80               | NHO                |              |      |         |                            |                              |                        |
|            | 5         | 1.726           | 3               |                  |                        | .59                |                             |                              |                  | 80               | NHO                |              |      |         |                            |                              |                        |
| Nov. 14    | 3         | 7.936           | 2               |                  |                        | .10                |                             |                              |                  | 77               | NHO                |              |      |         |                            |                              |                        |
|            | 4         | 5.747           | 1               | 2:10PM           | 10                     | .09                | .72                         | .36                          | .18              | 77               | NHO                |              |      |         |                            |                              |                        |
|            | 5         | 1.726           | 3               |                  |                        | .05                |                             |                              |                  | 77               | NHO                |              |      |         |                            |                              |                        |
| Nov. 18-30 | 3         | 7.936           | 2               |                  |                        | .07                |                             |                              |                  | 79-74            | NHO                |              |      |         |                            |                              |                        |
|            | 4         | 5.747           | 1               | 4:45PM           | 795                    | .07                | .12                         | .08                          | .04              | 79-74            | NHO                |              |      |         |                            |                              |                        |
|            | 5         | 1.726           | 3               |                  |                        | .08                |                             |                              |                  | 79-74            | NHO                |              |      |         |                            |                              |                        |
| Nov. 19    | 3         | 7.936           | 2               |                  |                        | 1.97               |                             |                              |                  | 74               | NHO                |              |      |         |                            |                              |                        |
|            | 4         | 5.747           | 1               | 11:32AM          | 620                    | 2.00               | 2.76                        | 2.24                         | 1.86             | 74               | 7:18PM             | 12:41AM      | .182 | 1.30    | 7:40PM                     | 1.818                        | .267                   |
|            | 5         | 1.726           | 3               |                  |                        | 1.96               |                             |                              |                  | 74               | 3:11:30P           | 3:11:30P     | .072 | No rate | No rate                    | 1.888                        | .000                   |
| Nov. 20-21 | 3         | 7.936           | 2               |                  |                        | 1.70               |                             |                              |                  | 77-67            | NHO                |              |      |         |                            |                              |                        |
|            | 4         | 5.747           | 1               | 4:23PM           | 1037                   | 1.73               | 1.77                        | .69                          | .44              | 77-67            | 5:00PM             | 6:50PM       | .111 | .29     | 8:01PM                     | 1.282                        | .047                   |
|            | 5         | 1.726           | 3               |                  |                        | 1.93               |                             |                              |                  | 77-67            | 3:11:30P           | 3:11:30P     | .023 | No rate | No rate                    | 1.907                        | .000                   |





**UNITED STATES DEPARTMENT OF AGRICULTURE**  
**SOIL CONSERVATION SERVICE**  
 DIVISION OF RESEARCH

MONTH Nov. & Dec., 1934  
 SHEET 6 OF 6 PAGES

**RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS**

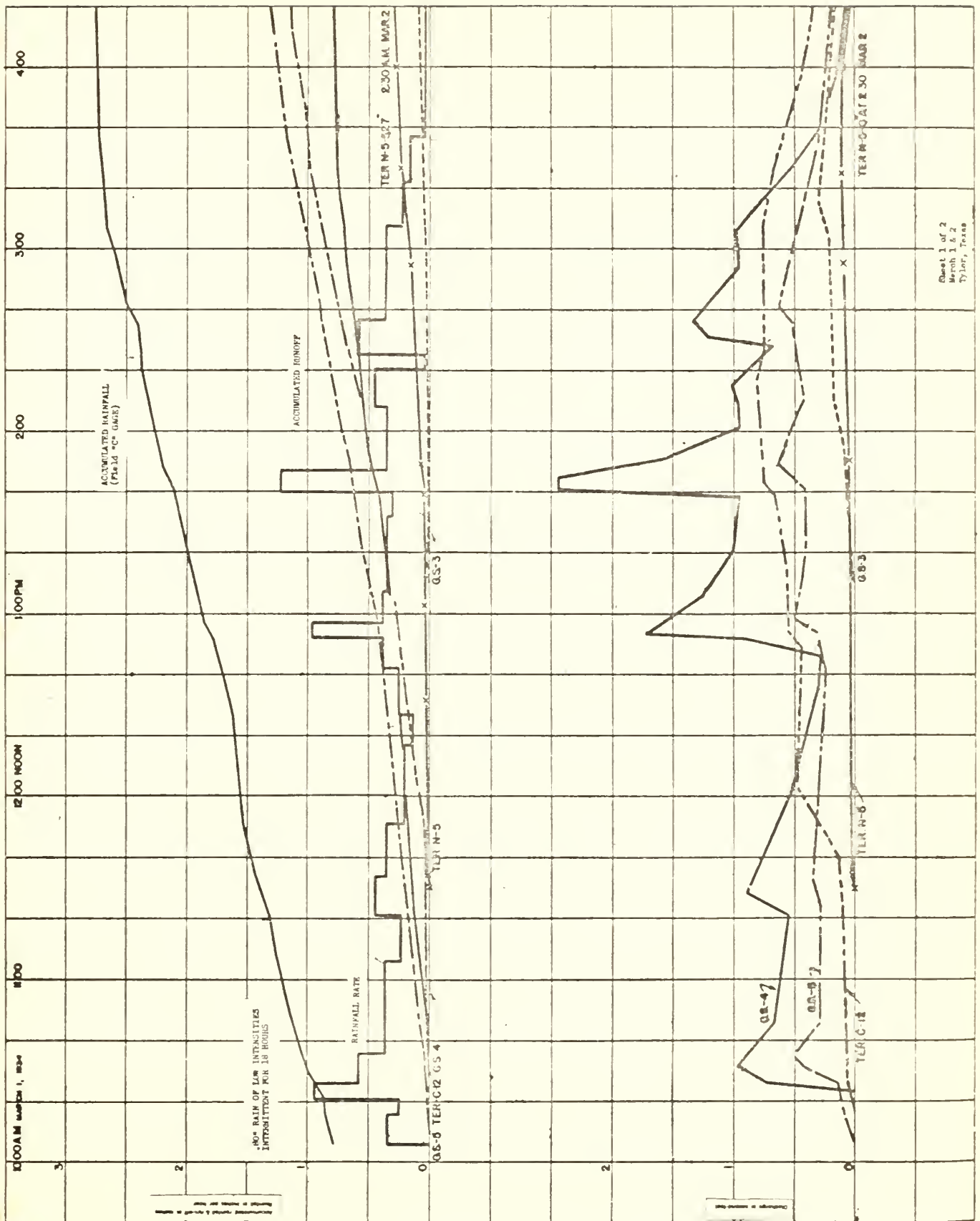
Project SCS Experiment Station, Tyler, Texas

| Date<br>1934 | WATERSHED |                 | RAINFALL  |                 |                       |                    |                                |                                 |                                 | TEMPERATURE<br>(degrees F) |         | RUN-OFF         |               |                    |              | RAINFALL METERS<br>(inches) | NET LOSS<br>(tons per acre) | CONDITION OF WATERSHED                            |      |
|--------------|-----------|-----------------|-----------|-----------------|-----------------------|--------------------|--------------------------------|---------------------------------|---------------------------------|----------------------------|---------|-----------------|---------------|--------------------|--------------|-----------------------------|-----------------------------|---------------------------------------------------|------|
|              | Number    | Area<br>(acres) | Open Sta. | Begin<br>(hour) | Duration<br>(minutes) | Amount<br>(inches) | MAXIMUM INTENSITY              |                                 |                                 | Minimum                    | Maximum | Begin<br>(hour) | End<br>(hour) | Amount<br>(inches) | MAXIMUM RATE |                             |                             |                                                   |      |
|              |           |                 |           |                 |                       |                    | 4 minutes<br>(inches per hour) | 14 minutes<br>(inches per hour) | 30 minutes<br>(inches per hour) |                            |         |                 |               |                    | Cu Ft. Sec.  |                             |                             |                                                   | Time |
| (1)          | (2)       | (3)             | (4)       | (5)             | (6)                   | (7)                | (8)                            | (9)                             | (10)                            | (11)                       | (12)    | (13)            | (14)          | (15)               | (16)         | (17)                        | (18)                        | (19)                                              |      |
| Nov. 25      | 3         | 7.936           | 2-F-PB    |                 |                       | .25                |                                |                                 |                                 | 66                         | 45      | NRO             |               |                    |              |                             |                             | Woods dormant                                     |      |
|              | 4         | 5.747           | 1-F-C     | 3:07PM          | 144                   | .25                | .36                            | .28                             | .20                             | 66                         | 45      | NRO             |               |                    |              |                             |                             | Oats 2", fair stand, corn                         |      |
|              | 5         | 1.726           | 3-F-A     |                 |                       | .27                |                                |                                 |                                 | 66                         | 45      | NRO             |               |                    |              |                             |                             | Stubble; Strip cropped Oats 2" & Sorghum Stubble  |      |
| Nov. 29      | 3         | 7.936           | 2         | 7:15AM          | 510                   | 1.31               | .60                            | .36                             | .32                             | 52                         | 38      | NRO             |               | .072               | .41          | 10:09AM                     |                             | Woods dormant                                     |      |
|              | 4         | 5.747           | 1         |                 |                       | 1.26               |                                |                                 |                                 | 52                         | 38      | 9:04AM          | 2:04PM        | .040               | No rate      |                             | .122                        | Oats 2", fair stand, corn                         |      |
|              | 5         | 1.726           | 3         |                 |                       | 1.35               |                                |                                 |                                 | 52                         | 38      | Silt box        |               |                    |              | 1.310                       | .000                        | Stubble, Oats 2" & Sorghum Stubble                |      |
| Dec. 2       | 3         | 7.936           | 2         |                 |                       | 1.63               | 2.40                           | 1.56                            | 1.50                            | 59                         | 46      | NRO             |               | .549               | 6.44         | 1:08PM                      | 2.829                       | Woods dormant                                     |      |
|              | 4         | 5.747           | 1         | 12:35PM         | 305                   | 1.61               |                                |                                 |                                 | 59                         | 46      | 12:50PM         | 5:56PM        | .447               | .82          | 1:10PM                      | .129                        | Oats 3", fair stand, corn                         |      |
|              | 5         | 1.726           | 3         |                 |                       | 1.58               |                                |                                 |                                 | 59                         | 46      | 12:50PM         | 5:56PM        |                    |              |                             |                             | Stubble, Oats, fair stand 1"-3" & Sorghum Stubble |      |
| Dec. 17      | 3         | 7.936           | 2         |                 |                       | .55                |                                |                                 |                                 | 65                         | 48      | NRO             |               |                    |              |                             |                             | Woods dormant                                     |      |
|              | 4         | 5.747           | 1         | 12:20AM         | 630                   | .55                | .84                            | .52                             | .38                             | 65                         | 48      | NRO             |               |                    |              |                             |                             | Oats fair stand & corn stubble                    |      |
|              | 5         | 1.726           | 3         |                 |                       | .66                |                                |                                 |                                 | 65                         | 48      | NRO             |               |                    |              |                             |                             | Oats, fair stand & Sorghum Stubble                |      |
| Dec. 25      | 3         | 7.936           | 2         |                 |                       | .12                |                                |                                 |                                 | 72                         | 59      | NRO             |               |                    |              |                             |                             | Woods dormant                                     |      |
|              | 4         | 5.747           | 1         | 8:00AM          | 140                   | .11                | .24                            | .16                             | .10                             | 72                         | 59      | NRO             |               |                    |              |                             |                             | Oats, fair stand & corn stubble                   |      |
|              | 5         | 1.726           | 3         |                 |                       | .12                |                                |                                 |                                 | 72                         | 59      | NRO             |               |                    |              |                             |                             | Oats & Sorghum stubble                            |      |
| Dec. 27      | 3         | 7.936           | 2         |                 |                       | .18                |                                |                                 |                                 | 55                         | 42      | NRO             |               |                    |              |                             |                             | Woods dormant                                     |      |
|              | 4         | 5.747           | 1         | 6:22AM          | 260                   | .17                | .12                            | .12                             | .10                             | 55                         | 42      | NRO             |               |                    |              |                             |                             | Oats, fair stand & corn stubble                   |      |
|              | 5         | 1.726           | 3         |                 |                       | .18                |                                |                                 |                                 | 55                         | 42      | NRO             |               |                    |              |                             |                             | Oats & Sorghum stubble                            |      |
| Dec. 31      | 3         | 7.936           | 2         |                 |                       | .13                | .24                            | .12                             | .12                             | 53                         | 45      | NRO             |               |                    |              |                             |                             | Woods dormant                                     |      |
|              | 4         | 5.747           | 1         | 9:47AM          | 115                   | .13                |                                |                                 |                                 | 53                         | 45      | NRO             |               |                    |              |                             |                             | Oats, fair stand & corn stubble                   |      |
|              | 5         | 1.726           | 3         |                 |                       | .13                |                                |                                 |                                 | 53                         | 45      | NRO             |               |                    |              |                             |                             | Oats, fair stand & corn stubble                   |      |
| Dec. 31      | 3         | 7.936           | 2         |                 |                       | .18                |                                |                                 |                                 | 53                         | 45      | NRO             |               |                    |              |                             |                             | Woods dormant                                     |      |
|              | 4         | 5.747           | 1         | 2:45PM          | 130                   | .07                | .24                            | .16                             | .10                             | 53                         | 45      | NRO             |               |                    |              |                             |                             | Oats, fair stand & corn stubble                   |      |
|              | 5         | 1.726           | 3         |                 |                       | .23                |                                |                                 |                                 | 53                         | 45      | NRO             |               |                    |              |                             |                             | Oats fair stand 2"-4" & Sorghum Stubble           |      |

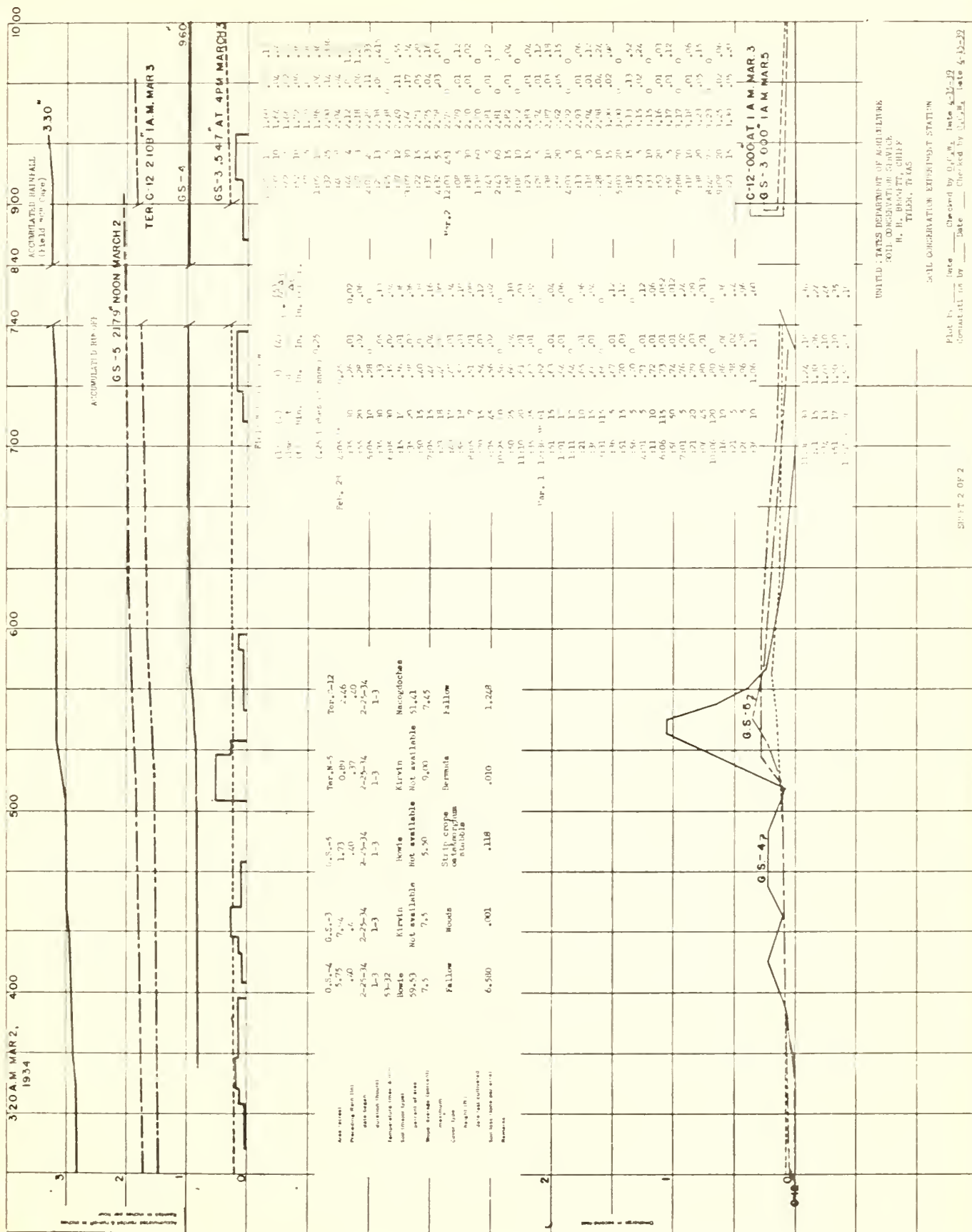
\*See next page













~~BLANKET IN CUBIC FEET PER SECOND~~

1890

205

1772

1890

ACQUAINTED RANFELL C. 2211  
WILL "L. GARDEN"

172 115.3-116 47 12 52 PM Nov 18 1895

65-7

G.S.-3 HEAD OF Q.03 FROM PREVIOUS RAIN

05-3-0 AT 12:55 PM MARCH 5

[illegible]

|                          |          |           |          |
|--------------------------|----------|-----------|----------|
| Mean (s.d.)              | 0.5, 0.6 | 0.5, 0.4  | 0.5, 0.5 |
| Feeding time (s)         | 7.9, 96  | 7.9, 96   | 7.9, 96  |
| Gate began               | 3.23     | 3.30      | 1.23     |
|                          | 2-28     | 2-28      | 2-28     |
| Duration (months)        |          | 48        |          |
| Temperature (mm. & mm.)  | Max. 69  | Min. 40   |          |
| Spill (mm. type)         | Min 10   | Dom 10    |          |
| Percent off top          | 7.50X    | 7.50X     |          |
| Shore (percent) percent  |          | 50-50     |          |
| Temperature (mm. type)   |          |           |          |
| Core type                | Wood 1   | Fallow    |          |
| Length (s)               | 1.08     | Lat. Fall |          |
| Gate last collected      |          |           |          |
| Spill (mm. type) percent |          | 4.63      |          |
|                          |          |           | 4.88     |

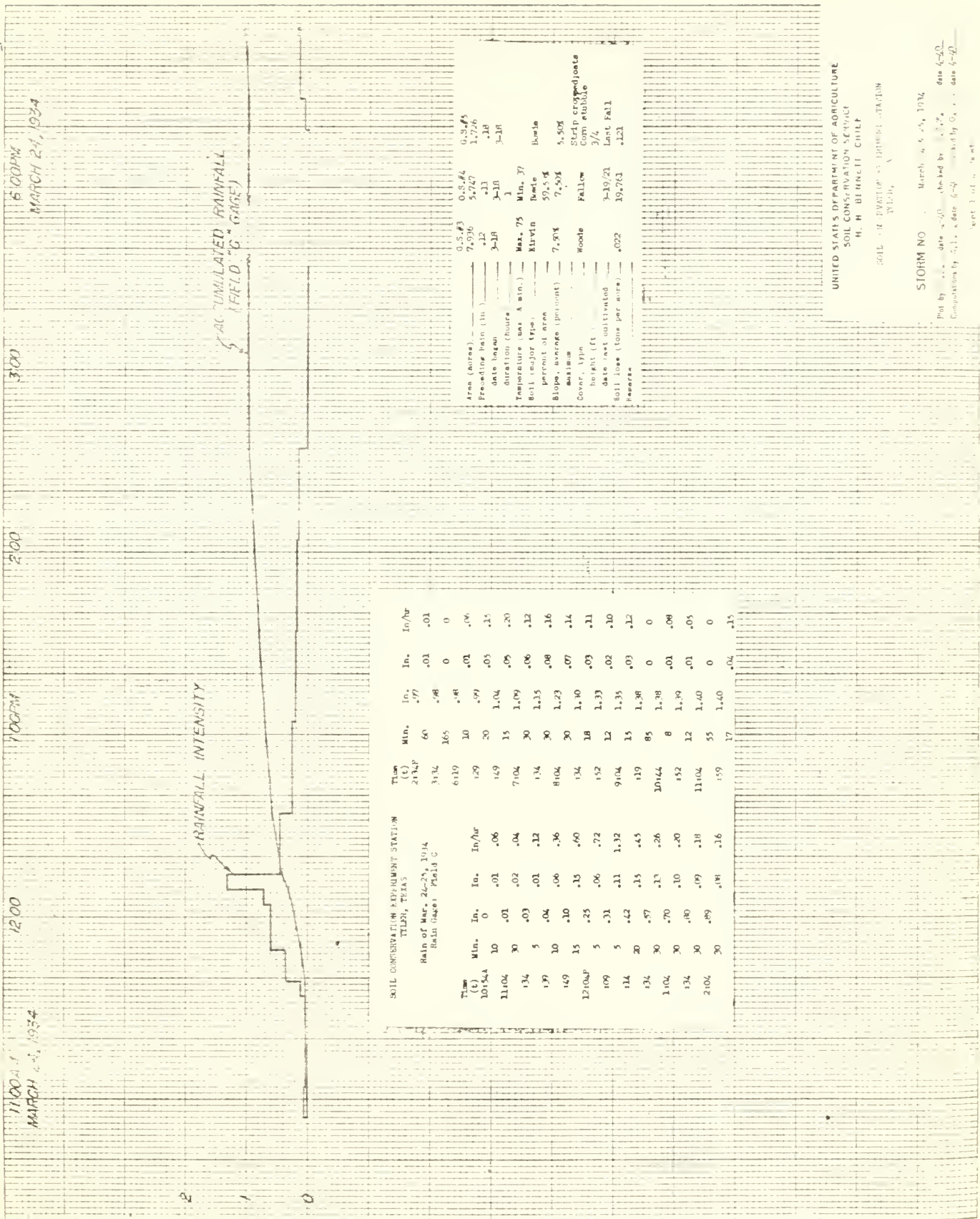
UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT, CHIEF

STORM NO

Plutonium, also known as "the bomb," is a highly radioactive element that is used in nuclear weapons and nuclear power plants. It is a man-made element that is created by bombarding uranium with neutrons.







ACCUMULATED RAINFALL & RUNOFF IN INCHES  
RAINFALL INTENSITY IN INCHES PER HOUR  
RUNOFF IN CUBIC FEET PER SECOND

SOIL CONSERVATION EXPERIMENT STATION  
TULSA, TEXAS

Rain of Mar. 24-25, 1934  
Rain (Gage) Field G

| Time (t) | Min. | In. | In./hr | Time (t) | Min. | In. | In./hr |
|----------|------|-----|--------|----------|------|-----|--------|
| 11:00A   | 10   | .01 | .06    | 1:00P    | 60   | .01 | .01    |
| 11:04    | 30   | .03 | .04    | 1:04     | 16   | .00 | 0      |
| 11:14    | 5    | .04 | .12    | 1:08     | 20   | .01 | .06    |
| 11:19    | 10   | .10 | .36    | 1:14     | 30   | .05 | .15    |
| 11:24    | 15   | .15 | .60    | 1:18     | 30   | .06 | .20    |
| 11:29    | 5    | .21 | .72    | 1:24     | 30   | .08 | .22    |
| 11:34    | 5    | .42 | .45    | 1:30     | 30   | .16 | .16    |
| 11:39    | 20   | .57 | .26    | 1:36     | 30   | .07 | .14    |
| 11:44    | 30   | .70 | .20    | 1:40     | 18   | .03 | .11    |
| 11:49    | 30   | .80 | .18    | 1:44     | 12   | .02 | .10    |
| 11:54    | 30   | .89 | .16    | 1:48     | 15   | .03 | .12    |
| 12:00P   | 30   | .98 | .16    | 1:52     | 85   | 0   | 0      |
|          |      |     |        | 1:56     | 8    | .01 | .04    |
|          |      |     |        | 2:00     | 12   | .01 | .05    |
|          |      |     |        | 2:04     | 55   | 0   | 0      |
|          |      |     |        | 2:08     | 17   | .04 | .15    |

|                           |         |         |               |
|---------------------------|---------|---------|---------------|
| Area (Acres) —            | 0.543   | 0.544   | 0.545         |
| Preceding Rain (in.)      | 7.936   | 5.747   | 1.726         |
| date log                  | 3-18    | 3-18    | 3-18          |
| duration (hours)          | Max. 75 | Min. 37 |               |
| Temperature (F)           | 75      | 75      | 75            |
| Soil (major type)         | Clay    | Clay    | Clay          |
| percent of area           | 7.9%    | 7.9%    | 7.9%          |
| Slope, average (percent)  | —       | —       | —             |
| Cover, type               | Woods   | Fallow  | Strip cropped |
| height (ft)               | —       | —       | —             |
| date last cultivated      | —       | 3-19/21 | 3-19          |
| Soil loss (tons per acre) | .022    | 19.761  | .121          |
| Remarks                   |         |         |               |

ACCUMULATED RAINFALL  
(FIELD "G" GAGE)

RAINFALL INTENSITY

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT CHIEF

STATION NO. 11100A-1  
TULSA, OKLA.

STORM NO. 11100A-1  
March 24, 1934

Plot by ... date ... checked by ... date 4-20-34  
Computed by ... date 6-4-34 checked by O. A. ... date 6-4-34

Sheet 1 of 1



8:00PM  
MARCH 24, 1934

9:00

11:00

2:00

1:00AM  
MARCH 25, 1934

2:00

6:00AM

7:00

ACCUMULATED RAINFALL & RUNOFF IN INCHES  
RAINFALL INTENSITY IN INCHES PER HOUR

RAINFALL INTENSITY

ACCUMULATED RAINFALL  
(FIELD GAGE)

SOIL CONSERVATION EXPERIMENT STATION  
TULSA, TEXAS

Rain of Mar. 25, 1934  
Rain Gage: Field C

| Time<br>(h:m) | Min. | In.  | In./hr   | Time<br>(h:m) | Min. | In.  | In./hr |
|---------------|------|------|----------|---------------|------|------|--------|
| 12:14         | 18   | 1.44 | .04 .15  | 1:04          | 30   | 2.23 | .28    |
| 1:04          | 30   | 1.48 | .06 .12  | 1:14          | 15   | 2.25 | .48    |
| 1:14          | 30   | 1.54 | .04 .08  | 1:19          | 15   | 2.27 | .48    |
| 1:19          | 30   | 1.58 | .02 .04  | 1:24          | 15   | 2.44 | .28    |
| 2:04          | 20   | 1.60 | .01 .003 | 1:29          | 15   | 2.50 | .24    |
| 6:04          | 15   | 1.61 | .03 .12  | 1:34          | 20   | 2.61 | .13    |
| 1:19          | 15   | 1.64 | .02 .08  | 1:39          | 10   | 2.68 | .42    |
| 1:34          | 17   | 1.66 | 0 0      | 1:44          | 10   | 2.73 | .30    |
| 1:31          | 13   | 1.66 | .04 .185 | 1:49          | 5    | 2.73 | .09    |
| 7:04          | 60   | 1.70 | .03 .01  | 1:54          | 5    | 2.82 | .12    |
| 8:04          | 15   | 1.71 | .05 .20  | 1:59          | 5    | 2.83 | .12    |
| 1:19          | 15   | 1.76 | .06 .24  | 2:04          | 5    | 2.89 | .16    |
| 1:34          | 30   | 1.82 | .17 .34  | 2:09          | 3    | 3.06 | .07    |
|               |      |      |          | 2:14          | 2    | 3.10 | .04    |
|               |      |      |          | 2:19          | 5    | 3.16 | .06    |
|               |      |      |          | 2:24          | 15   | 3.26 | .23    |
|               |      |      |          | 2:29          | 15   | 3.39 | .01    |
|               |      |      |          | 2:34          | 30   | 3.40 | .01    |
|               |      |      |          | 2:39          | 30   | 3.41 | .05    |
|               |      |      |          | 2:44          | 30   | 3.41 | .10    |

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT, CHIEF  
SOIL CONSERVATION EXPERIMENT STATION  
TULSA, TEXAS

STORM NO. March 24 & 25, 1934  
Plot by B. G. date 2-40 checked by J. L. B. date 2-40  
Completed by H. L. G. date 2-40 checked by H. L. G. date 2-40  
Sheet 2 of 4 sheets







1007



BLINDOFF IN CUBIC FEET PER SECOND

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BINNETT, CHIEF

THE UNIVERSITY OF MICHIGAN LIBRARY

STORM NO. .... - August 26 A. M. 1954

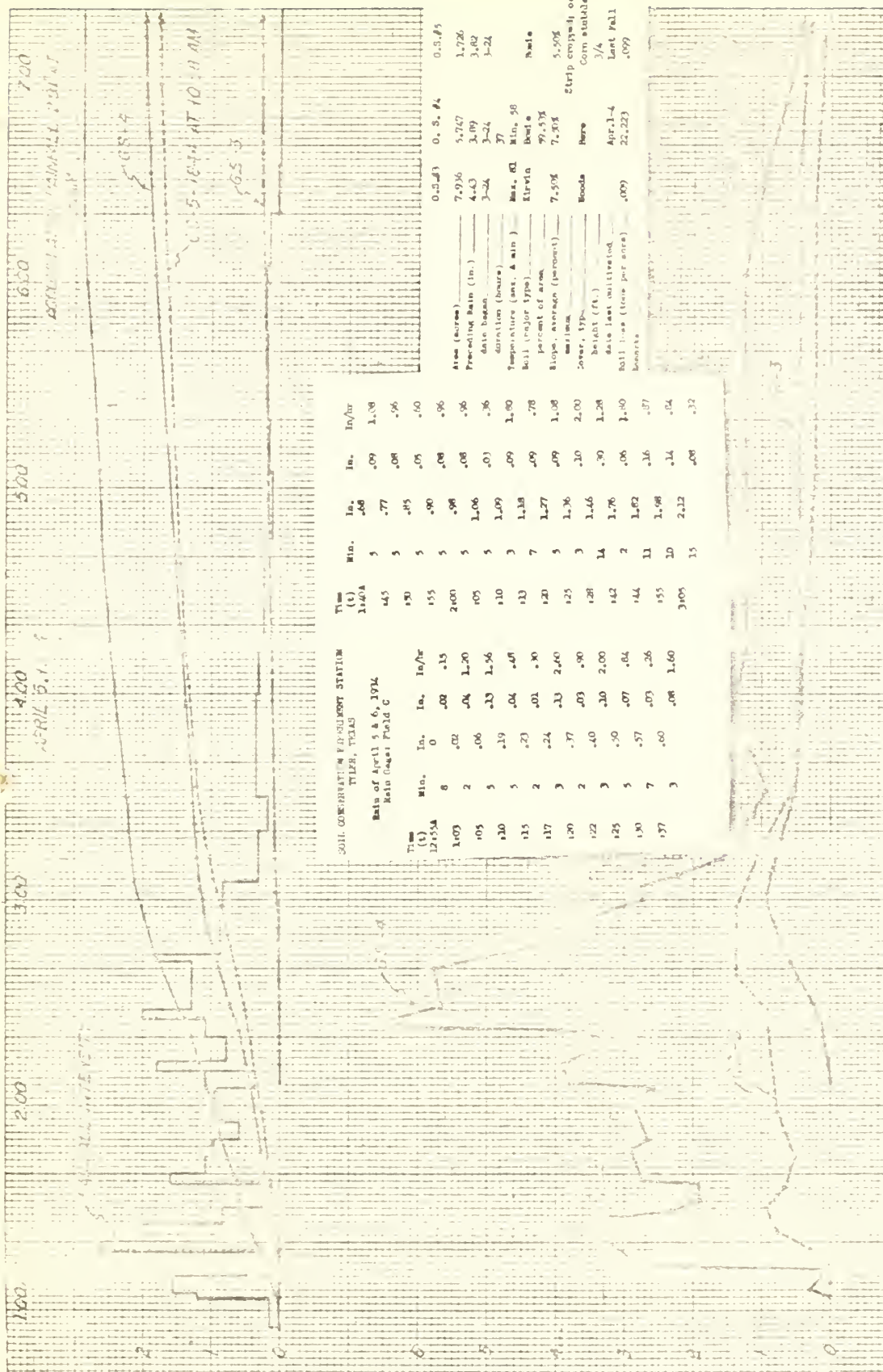
Plot by Data rate &  $\Delta Q$  extracted by  $\chi^2$  min. data used  
Comments by  $\chi^2$   $\Delta Q$  data - 5 yf. he sat. Data. rate.  $\Delta Q$

most of 4 clients



ACCUMULATED RAINFALL & ACCUMULATED RUNOFF IN INCHES

~~RUNOFF IN CUBIC FEET PER SECOND~~



UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. DENNELL, CHIEF.

SOIL AND WATER SUPPLY STATION  
TULSA, TEXAS

STORM NO. ——— APRIL 5 & 6, 1934

Time & place are left blank by I. N. ... date ...  
[...], however, Y. J. ... A is worked by ... date ...

'09-1-18 / 60-1-18





5:00PM 10:00 11:00 12:00 1:00AM 2:00AM 3:00AM 4:00AM 5:00AM  
APRIL 5, 1934 APRIL 6, 1934

ACCUMULATED RAINFALL & ACCUMULATED RUNOFF IN IN.

RAINFALL INTENSITY IN INCHES PER HOUR RUNOFF IN CUBIC FEET PER SECOND

RAINFALL INTENSITY

SOIL CONSERVATION EXPERIMENT STATION  
TULSA, TEXAS

Rain of April 5 & 6, 1934  
Rain Gauge: Field C

| Time<br>(h) | Min. | In.  | In/hr |
|-------------|------|------|-------|
| 3:20A       | 10   | 2.20 | .03   |
| 3:30        | 30   | 2.23 | .18   |
| 4:00        | 15   | 2.41 | .36   |
| 4:15        | 30   | 2.69 | .22   |
| 4:45        | 20   | 2.63 | .24   |
| 5:05        | 15   | 2.65 | .12   |
| 5:20        | 25   | 2.69 | .16   |
| 5:45        | 20   | 2.77 | .19   |
| 6:05        | 15   | 2.84 | .21   |
| 6:20        | 15   | 2.88 | .16   |
| 6:35        | 90   | 2.89 | .04   |
| 6:55        | 70   | 2.91 | .03   |
| 7:10        | 0    | 0    | 0     |

SOIL CONSERVATION EXPERIMENT STATION  
TULSA, TEXAS

Rain of April 5 & 6, 1934  
Rain Gauge: Field C

| Time<br>(h) | Min. | In.  | In/hr |
|-------------|------|------|-------|
| 9:15P       | 5    | 2.91 | .24   |
| 9:30        | 2    | 2.99 | 1.80  |
| 10:2        | 8    | 3.11 | .90   |
| 11:0        | 5    | 3.18 | .64   |
| 11:5        | 5    | 3.22 | .48   |
| 12:0        | 10   | 3.35 | .78   |
| 1:0         | 5    | 3.35 | .06   |

| Time  | Min. | In.  | In/hr |
|-------|------|------|-------|
| 9:15P | 10   | 3.41 | .62   |
| 9:45  | 10   | 3.48 | .54   |
| 10:15 | 20   | 3.57 | .21   |
| 10:35 | 15   | 3.64 | .24   |
| 11:00 | 30   | 3.70 | .12   |
| 11:30 | 30   | 3.76 | .07   |
| 12:00 | 30   | 3.83 | .10   |
| 12:30 | 30   | 3.92 | .06   |
| 1:00  | 390  | 3.95 | 0     |
| 1:30  | 60   | 3.95 | .02   |
| 1:50  | 0    | 3.97 | 0     |

65-4-1-17 AT 10:45AM  
65-3-1-18 AT 10:45AM  
65-2-1-19 AT 10:45AM  
65-1-1-20 AT 10:45AM

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
TULSA, OKLA.  
OFFICE OF THE DISTRICT ENGINEER  
TULSA, OKLA.

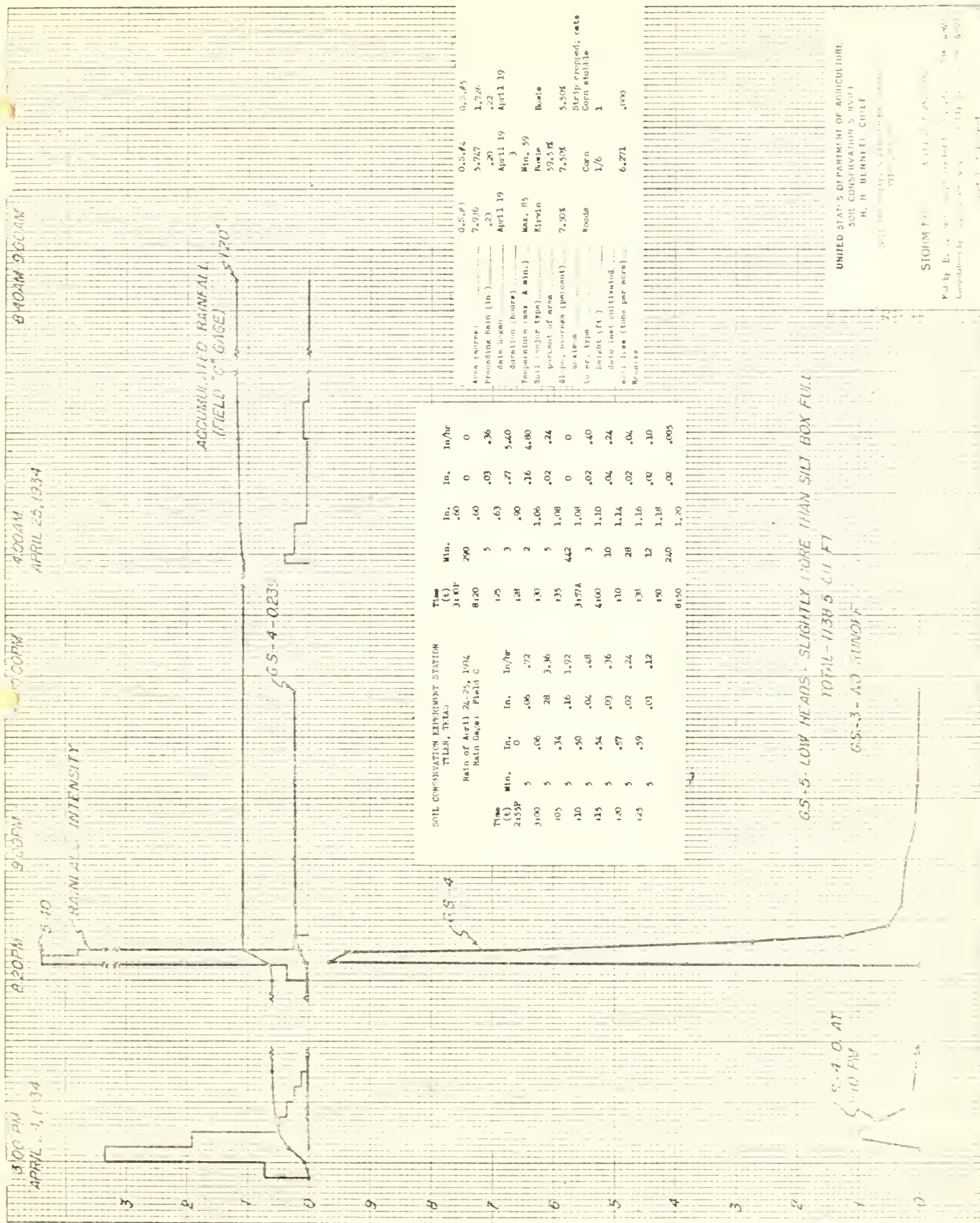
STATION NO. 4-1-2-6-10-4



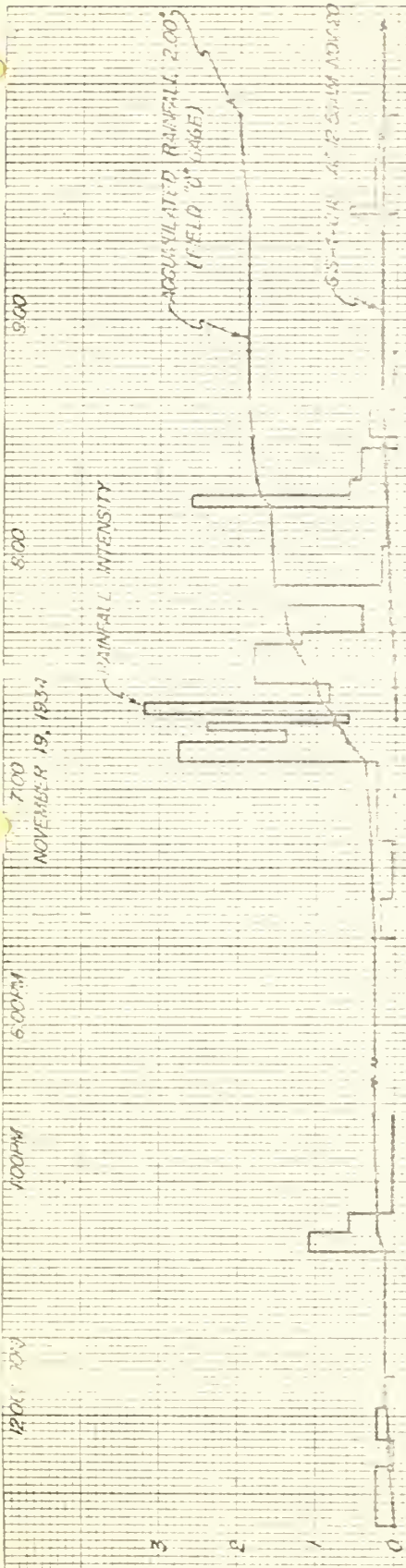


ACCUMULATED RAINFALL & ACCUMULATED RUNOFF IN INCHES

RUNOFF IN CUBIC FEET PER SECOND



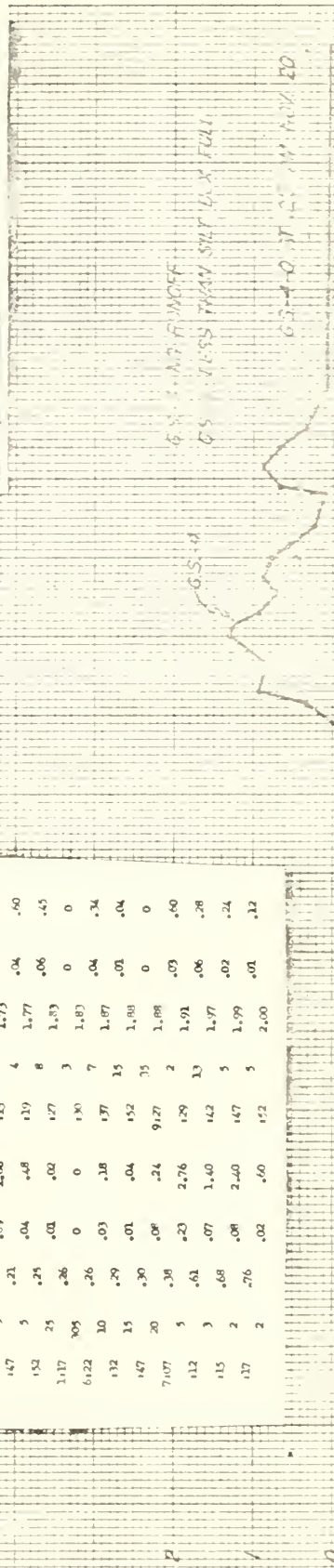




SOIL CONSERVATION EQUIPMENT STATION  
TULSA, TEXAS

| Time (h) | Min. | In.  | In./hr | Time (h) | Min. | In.  | In./hr |
|----------|------|------|--------|----------|------|------|--------|
| 11:32A   | 15   | 0    | 0.06   | 12:00    | 10   | 0.07 | 0.84   |
| 147      | 7    | 0.07 | 0.09   | 147      | 10   | 0.06 | 1.80   |
| 154      | 8    | 0.20 | 0.23   | 152      | 7    | 1.42 | 1.30   |
| 12:02    | 8    | 0.22 | 0.25   | 152      | 5    | 1.55 | 1.56   |
| 130      | 12   | 0    | 0      | 8:02     | 10   | 1.58 | 0.18   |
| 142      | 5    | 0.21 | 0.09   | 112      | 3    | 1.60 | 0.12   |
| 147      | 5    | 0.21 | 0.04   | 115      | 3    | 1.73 | 2.60   |
| 152      | 25   | 0.25 | 0.02   | 119      | 4    | 1.77 | 0.60   |
| 1:17     | 305  | 0.26 | 0      | 127      | 8    | 1.83 | 0.45   |
| 6:22     | 10   | 0.29 | 0.18   | 130      | 3    | 1.85 | 0      |
| 132      | 15   | 0.30 | 0.04   | 137      | 7    | 1.87 | 0.34   |
| 147      | 20   | 0.36 | 0.08   | 135      | 15   | 1.88 | 0.04   |
| 7:07     | 5    | 0.61 | 0.23   | 152      | 15   | 1.88 | 0      |
| 112      | 5    | 0.68 | 0.07   | 9:27     | 2    | 1.88 | 0.60   |
| 115      | 2    | 0.68 | 0.08   | 129      | 13   | 1.91 | 0.28   |
| 117      | 2    | 0.76 | 0.02   | 142      | 5    | 1.97 | 0.24   |
|          |      |      |        | 147      | 5    | 1.99 | 0.12   |
|          |      |      |        | 152      | 5    | 2.00 | 0.12   |

RUNOFF IN CUBIC FEET PER SECOND



UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT, CHIEF  
SOIL CONSERVATION EQUIPMENT STATION  
TULSA, OKLA.

STORM NO. 10 November 19, 1934

Plot by R.G. date 6-40 checked by O.G.M. date 6-40  
Computations by W.J.G. date 6-40 checked by O.G.M. date 6-40





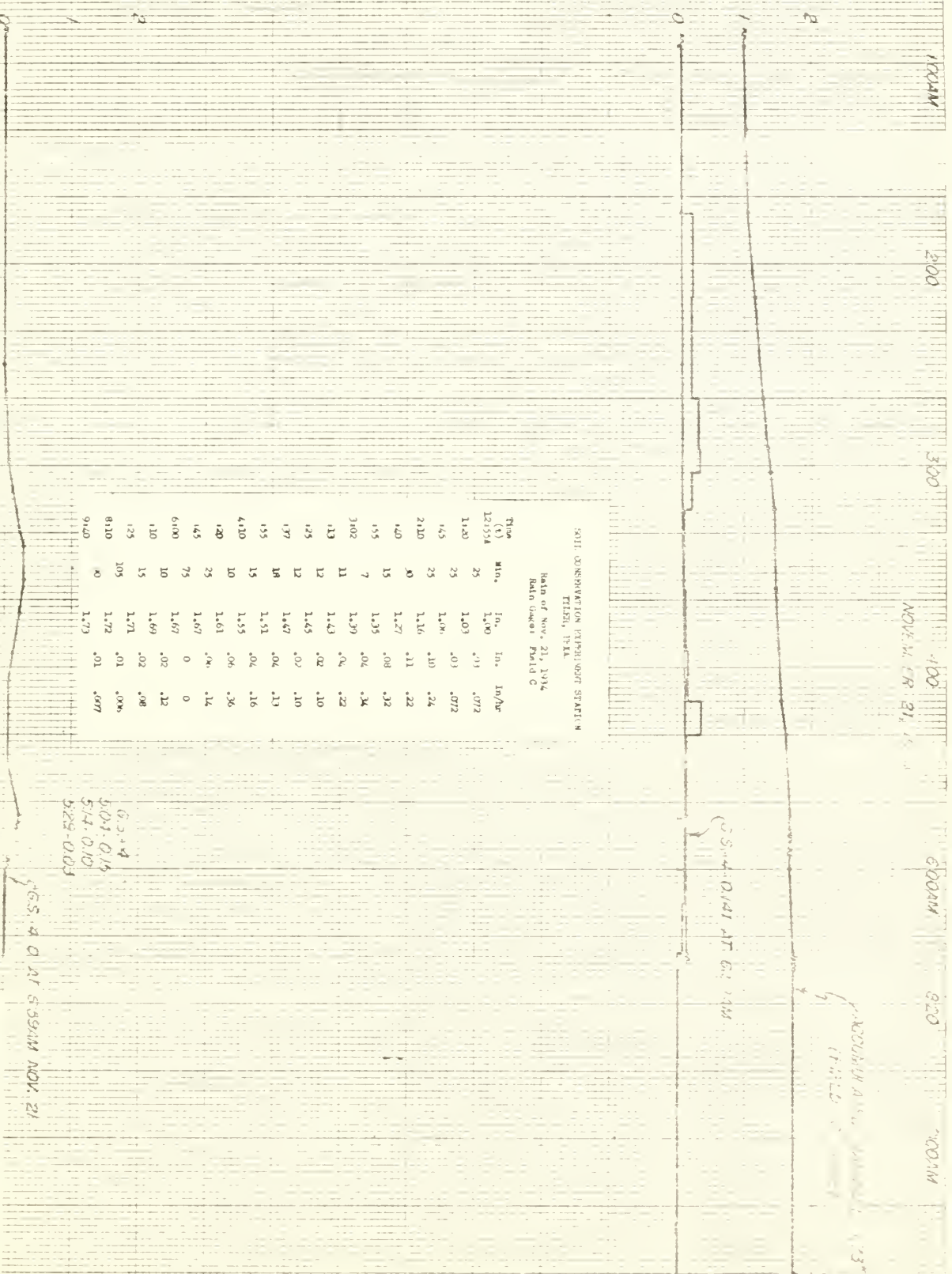






RUNOFF IN CUBIC FEET PER SECOND

ACCUMULATED RAINFALL & RUNOFF IN INCHES  
RAINFALL INTENSITY IN INCHES PER HOUR



SOIL CONSERVATION PAPER 1007 STATION  
FIELD, 1914  
Rain of Nov. 21, 1914  
Rain Gauge Field C

| Time (h) | Min. | In.  | In. | In/hr |
|----------|------|------|-----|-------|
| 12:55    | 25   | 1.00 | .11 | .072  |
| 1:00     | 25   | 1.03 | .03 | .072  |
| 1:05     | 25   | 1.06 | .10 | .24   |
| 2:10     | 30   | 1.16 | .11 | .22   |
| 4:00     | 15   | 1.27 | .08 | .32   |
| 5:55     | 7    | 1.35 | .04 | .34   |
| 7:02     | 11   | 1.39 | .04 | .22   |
| 8:13     | 12   | 1.43 | .02 | .10   |
| 9:25     | 12   | 1.45 | .02 | .10   |
| 10:37    | 12   | 1.47 | .02 | .10   |
| 11:45    | 14   | 1.51 | .04 | .16   |
| 12:55    | 15   | 1.55 | .06 | .36   |
| 14:10    | 10   | 1.61 | .06 | .36   |
| 15:20    | 25   | 1.67 | .04 | .14   |
| 16:45    | 75   | 1.67 | 0   | 0     |
| 18:00    | 10   | 1.69 | .02 | .12   |
| 19:10    | 15   | 1.71 | .02 | .08   |
| 20:25    | 105  | 1.72 | .01 | .006  |
| 21:40    | 80   | 1.73 | .01 | .007  |

6.2+4  
50.1 0.15  
51.4 0.10  
52.5 0.03

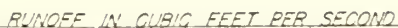
65.4 0.11 5:55 AM NOV. 21

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT, CHIEF

STORM NO. 1000  
NOV. 21, 1914



RUNOFF IN CUBIC FEET PER SECOND



SOIL CONSERVATION SERVICE

M. H. BENNETT, CHIEF

COIL CONCENTRATION 0.1 M  
CYLINDER TITRANT 0.1 M

STORM NO. ... December 2, 1934

|                         |               |                     |               |
|-------------------------|---------------|---------------------|---------------|
| Print by ..Hak2...      | date Apr 1940 | checked by ..O.C.W. | date Apr 1940 |
| for updates by ..P.J.G. | date Apr 1940 | checked by ..O.C.W. | date Apr 1940 |





UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
DIVISION OF RESEARCH

MONTH Jan. & Feb., 1935  
SHEET 1 OF 10 SHEETS

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

PROJECT 563 EXPERIMENT STATION, TULSA, TEXAS

| Date    | Watershed |              | Rainfall |              |                    |                 | Temperature (F)                     |                  | Run-off          |             |                     |                            | Total Run-off (cubic feet) | Run-off Rate (cubic feet per acre) | Condition of Watershed |
|---------|-----------|--------------|----------|--------------|--------------------|-----------------|-------------------------------------|------------------|------------------|-------------|---------------------|----------------------------|----------------------------|------------------------------------|------------------------|
|         | Number    | Area (acres) | Gage No. | Begin (hour) | Duration (minutes) | Amount (inches) | Maximum Intensity (inches per hour) | Maximum (inches) | Minimum (inches) | Peak (hour) | Amount (cubic feet) | Rate (cubic feet per acre) |                            |                                    |                        |
| (1)     | (2)       | (3)          | (4)      | (5)          | (6)                | (7)             | (8)                                 | (9)              | (10)             | (11)        | (12)                | (13)                       | (14)                       | (15)                               | (16)                   |
| Jan. 7  | 1         | 7.94         | 2-7-FB   |              |                    | 0.52            |                                     |                  | 50               |             | NRO                 |                            |                            |                                    | Woods (oaks) dormant   |
| Jan. 7  | 4         | 5.75         | 1-5-C    | 3:45AM       | 60                 | 0.48            | 0.48                                | 0.48             | 50               |             | 11:04AM 3:45PM      | 0.474                      | 0.474                      | 0.001                              | Woods (oaks) dormant   |
| Jan. 7  | 5         | 1.73         | 3-5-A    |              |                    | 0.93            |                                     |                  | 50               |             | Still box           | 0.002                      | 0.002                      | 0.000                              | Woods (oaks) dormant   |
| Jan. 19 | 3         | 7.94         | 2        |              |                    | 1.20            |                                     |                  | 74               | 53          | NRO                 |                            |                            |                                    | Woods (oaks) dormant   |
| Jan. 19 | 4         | 5.75         | 1        | 1:04AM       | 510                | 1.24            | 2.04                                | 1.20             | 74               | 53          | 6:45AM 1:04PM       | 0.766                      | 0.766                      | 4.431                              | Woods (oaks) dormant   |
| Jan. 19 | 5         | 1.73         | 3        |              |                    | 1.59            |                                     |                  | 74               | 53          | 7:02AM 1:04PM       | 1.165                      | 0.705                      | 0.126                              | Woods (oaks) dormant   |
| Jan. 20 | 3         | 7.94         | 2        |              |                    | 1.16            |                                     |                  | 70               | 41          | NRO                 |                            |                            |                                    | Woods (oaks) dormant   |
| Jan. 20 | 4         | 5.75         | 1        | 10:45AM      | 400                | 1.06            | 1.16                                | 0.98             | 70               | 41          | 10:45AM 9:32PM      | 0.299                      | 0.299                      | 0.419                              | Woods (oaks) dormant   |
| Jan. 20 | 5         | 1.73         | 3        |              |                    | 1.16            |                                     |                  | 70               | 41          | 10:45AM 1:05PM      | 0.138                      | 0.138                      | 0.050                              | Woods (oaks) dormant   |
| Feb. 7  | 3         | 7.94         | 2        |              |                    | 0.61            |                                     |                  | 67               | 51          | NRO                 |                            |                            |                                    | Woods (oaks) dormant   |
| Feb. 7  | 3         | 7.94         | 2        |              |                    | 0.61            |                                     |                  | 67               | 51          | NRO                 |                            |                            |                                    | Woods (oaks) dormant   |
| Feb. 7  | 4         | 5.75         | 1        | 1:45AM       | 600                | 0.63            | 0.20                                | 0.22             | 67               | 51          | NRO                 |                            |                            |                                    | Woods (oaks) dormant   |
| Feb. 7  | 4         | 5.75         | 1        |              |                    | 0.61            |                                     |                  | 67               | 51          | NRO                 |                            |                            |                                    | Woods (oaks) dormant   |
| Feb. 7  | 5         | 1.73         | 3        |              |                    | 0.63            |                                     |                  | 67               | 51          | NRO                 |                            |                            |                                    | Woods (oaks) dormant   |
| Feb. 7  | 5         | 1.73         | 3        |              |                    | 0.61            |                                     |                  | 67               | 51          | NRO                 |                            |                            |                                    | Woods (oaks) dormant   |
| Feb. 8  | 3         | 7.94         | 2        |              |                    | 2.09            |                                     |                  | 71               | 46          | Still box           | 0.005                      | 0.005                      | 0.000                              | Woods (oaks) dormant   |
| Feb. 8  | 4         | 5.75         | 1        | 4:00PM       | 245                | 1.98            | 1.50                                | 1.50             | 71               | 46          | 4:40PM 1:04PM       | 0.905                      | 0.905                      | 3.416                              | Woods (oaks) dormant   |
| Feb. 8  | 5         | 1.73         | 3        |              |                    | 1.94            |                                     |                  | 71               | 46          | 4:40PM 12:11AM      | 0.011                      | 0.011                      | 0.000                              | Woods (oaks) dormant   |
| Feb. 10 | 3         | 7.94         | 2        |              |                    | 0.16            |                                     |                  | 48               | 39          | NRO                 |                            |                            |                                    | Woods (oaks) dormant   |
| Feb. 10 | 4         | 5.75         | 1        | 4:17PM       |                    | 0.15            |                                     |                  | 48               | 39          | NRO                 |                            |                            |                                    | Woods (oaks) dormant   |
| Feb. 10 | 5         | 1.73         | 3        |              |                    | 0.17            |                                     |                  | 48               | 39          | NRO                 |                            |                            |                                    | Woods (oaks) dormant   |
| Feb. 12 | 3         | 7.94         | 2        |              |                    | 0.77            |                                     |                  | 50               | 42          | NRO                 |                            |                            |                                    | Woods (oaks) dormant   |
| Feb. 12 | 4         | 5.75         | 1        | 11:25AM      | 550                | 0.75            | 0.20                                | 0.18             | 50               | 42          | 11:25AM 8:00AM      | 0.004                      | 0.004                      | 0.002                              | Woods (oaks) dormant   |
| Feb. 12 | 5         | 1.73         | 3        |              |                    | 0.70            |                                     |                  | 50               | 42          | Still box           | 0.163                      | 0.163                      | 0.000                              | Woods (oaks) dormant   |
| Feb. 20 | 3         | 7.94         | 2        |              |                    | 0.16            |                                     |                  | 72               | 47          | NRO                 |                            |                            |                                    | Woods (oaks) dormant   |
| Feb. 20 | 4         | 5.75         | 1        |              |                    | 0.16            |                                     |                  | 72               | 47          | NRO                 |                            |                            |                                    | Woods (oaks) dormant   |
| Feb. 20 | 5         | 1.73         | 3        |              |                    | 0.16            |                                     |                  | 72               | 47          | NRO                 |                            |                            |                                    | Woods (oaks) dormant   |





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH
MONTH Mar. & Apr., 1932SHEET 2 OF 10 SHEETS

## RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

Project SCS Experiment Station, Tyler, Texas

| Date<br>1935 | WATERSHED |                 | Gage No. | Begin<br>(hour) | Duration<br>(minutes) | Amount<br>(inches) | RAINFALL                       |                                 |                                 | TEMPERATURE<br>(degrees F) |         |                 | RUN-OFF         |                    |              |        | Maximum Miles<br>Run-off<br>(inches) | Dry Load<br>(tons per acre) | CONDITION OF WATERSHED                                                                    |
|--------------|-----------|-----------------|----------|-----------------|-----------------------|--------------------|--------------------------------|---------------------------------|---------------------------------|----------------------------|---------|-----------------|-----------------|--------------------|--------------|--------|--------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------|
|              | Number    | Area<br>(acres) |          |                 |                       |                    | 8 minutes<br>(inches per hour) | 15 minutes<br>(inches per hour) | 30 minutes<br>(inches per hour) | Maximum                    | Minimum | Begin<br>(hour) | Flood<br>(hour) | Amount<br>(inches) | MAXIMUM RATE |        |                                      |                             |                                                                                           |
|              |           |                 |          |                 |                       |                    |                                |                                 |                                 |                            |         |                 |                 |                    | Cu ft. sec.  | Time   |                                      |                             |                                                                                           |
|              |           |                 |          |                 |                       |                    |                                |                                 |                                 |                            |         |                 |                 |                    |              |        |                                      |                             |                                                                                           |
| (1)          | (2)       | (3)             | (4)      | (5)             | (6)                   | (7)                | (8)                            | (9)                             | (10)                            | (11)                       | (12)    | (13)            | (14)            | (15)               | (16)         | (17)   | (18)                                 | (19)                        |                                                                                           |
| Mar. 4       | 3         | 7.94            | 2-F 7b   |                 |                       | 1.38               |                                |                                 |                                 | 69                         | 54      | NRO             |                 |                    |              |        |                                      |                             | Woods (oaks), dormant<br>Oats fair 4"; corn stubble<br>Recently plowed (Feb. 28, 1935)    |
| Mar. 4       | 4         | 5.75            | 1-F-C    | 1:46AM          | 935                   | 1.35               | 1.92                           | 1.64                            | 1.37                            | 69                         | 54      | 7:52AM          | 11:19PM         | 0.334              | 3:41         | 8:06AM | 1.855                                |                             |                                                                                           |
| Mar. 4       | 5         | 1.73            | 2-F-A    |                 |                       | 1.35               |                                |                                 |                                 | 69                         | 54      | 7:53AM          | 11:21AM         | 0.185              | 0:33         | 8:11AM | 0.040                                |                             |                                                                                           |
| Mar. 5-6     | 3         | 7.94            | 2        |                 |                       | *                  |                                |                                 |                                 | 79-76                      | 52-54   | NRO             |                 |                    |              |        |                                      |                             | Woods (oaks), dormant<br>Oats 4"; corn stubble<br>Buro-plowed Feb. 28                     |
| Mar. 5-6     | 4         | 5.75            | 1        | 11:50PM         | 45                    | 0.28               | 0.96                           | 0.64                            | 0.38                            | 79-76                      | 52-54   | Silt. box       |                 | 0.035              | No rate      | 0:245  | 0.053                                |                             |                                                                                           |
| Mar. 5-6     | 5         | 1.73            | 3        |                 |                       | *                  |                                |                                 |                                 | 79-76                      | 52-54   | NRO             |                 |                    |              |        |                                      |                             |                                                                                           |
| Mar. 6       | 3         | 7.94            | 2        |                 |                       | 0.48               |                                |                                 |                                 | 76                         | 54      | NRO             |                 |                    |              |        |                                      |                             | Woods (oaks), dormant<br>Oats 4" fair; corn stubble<br>Bare                               |
| Mar. 6       | 4         | 5.75            | 1        | 8:30AM          | 23                    | 0.14               |                                |                                 |                                 | 76                         | 54      | NRO             |                 |                    |              |        |                                      |                             |                                                                                           |
| Mar. 6       | 5         | 1.73            | 3        |                 |                       | 0.41               |                                |                                 |                                 | 76                         | 54      | NRO             |                 |                    |              |        |                                      |                             |                                                                                           |
| Mar. 11      | 3         | 7.94            | 2        |                 |                       | 0.19               |                                |                                 |                                 | 75                         | 61      | NRO             |                 |                    |              |        |                                      |                             | Woods (oaks), dormant<br>Oats 5"; corn stubble<br>Bare                                    |
| Mar. 11      | 4         | 5.75            | 1        | 11:06AM         | 75                    | 0.23               | 0.48                           | 0.32                            | 0.32                            | 75                         | 61      | NRO             |                 |                    |              |        |                                      |                             |                                                                                           |
| Mar. 11      | 5         | 1.73            | 3        |                 |                       | 0.23               |                                |                                 |                                 | 75                         | 61      | NRO             |                 |                    |              |        |                                      |                             |                                                                                           |
| Mar. 12      | 3         | 7.94            | 2        |                 |                       | 0.08               |                                |                                 |                                 | 61                         | 37      | NRO             |                 |                    |              |        |                                      |                             | Woods (oaks), dormant<br>Oats 5"; corn stubble<br>Bare                                    |
| Mar. 12      | 4         | 5.75            | 1        | 1:09AM          | 96                    | 0.07               |                                |                                 |                                 | 61                         | 37      | NRO             |                 |                    |              |        |                                      |                             |                                                                                           |
| Mar. 12      | 5         | 1.73            | 3        |                 |                       | 0.09               |                                |                                 |                                 | 61                         | 37      | NRO             |                 |                    |              |        |                                      |                             |                                                                                           |
| Mar. 26      | 3         | 7.94            | 2        |                 |                       | 0.30               |                                |                                 |                                 | 86                         | 65      | NRO             |                 |                    |              |        |                                      |                             | Woods (oaks), in bud<br>Oats 10"; corn stubble<br>Corn planted (Mar. 15, 1935)            |
| Mar. 26      | 4         | 5.75            | 1        | 12:24PM         | 41                    | 0.27               | 1.44                           | 0.96                            | 0.50                            | 86                         | 65      | NRO             |                 |                    |              |        |                                      |                             |                                                                                           |
| Mar. 26      | 5         | 1.73            | 3        |                 |                       | 0.22               |                                |                                 |                                 | 86                         | 65      | NRO             |                 |                    |              |        |                                      |                             |                                                                                           |
| Mar. 29      | 3         | 7.94            | 2        |                 |                       | Trace              |                                |                                 |                                 | 72                         | 50      | NRO             |                 |                    |              |        |                                      |                             | Woods (oaks), in bud<br>Oats 10"; corn stubble<br>Corn, control strip bare                |
| Mar. 29      | 4         | 5.75            | 1        |                 |                       | 0.01               |                                |                                 |                                 | 72                         | 50      | NRO             |                 |                    |              |        |                                      |                             |                                                                                           |
| Mar. 29      | 5         | 1.73            | 3        |                 |                       | Trace              |                                |                                 |                                 | 72                         | 50      | NRO             |                 |                    |              |        |                                      |                             |                                                                                           |
| Apr. 5       | 3         | 7.94            | 2        |                 |                       | 0.19               |                                |                                 |                                 | 89                         | 67      | NRO             |                 |                    |              |        |                                      |                             | Woods (oaks), in full leaf<br>Oats 12" fair; corn stubble<br>Corn planted (Mar. 15, 1935) |
| Apr. 5       | 4         | 5.75            | 1        | 5:48PM          | 161                   | 0.15               |                                |                                 |                                 | 89                         | 67      | NRO             |                 |                    |              |        |                                      |                             |                                                                                           |
| Apr. 5       | 5         | 1.73            | 3        |                 |                       | 0.13               |                                |                                 |                                 | 89                         | 67      | NRO             |                 |                    |              |        |                                      |                             |                                                                                           |
| Apr. 9       | 3         | 7.94            | 2        |                 |                       | *                  |                                |                                 |                                 | 64                         | 55      | NRO             |                 |                    |              |        |                                      |                             | Woods (oaks), in full leaf<br>Oats 12"; corn stubble<br>Corn 3"; control strip bare       |
| Apr. 9       | 4         | 5.75            | 1        | 12:46PM         | 214                   | 0.28               |                                |                                 |                                 | 64                         | 55      | NRO             |                 |                    |              |        |                                      |                             |                                                                                           |
| Apr. 9       | 5         | 1.73            | 3        |                 |                       | *                  |                                |                                 |                                 | 64                         | 55      | NRO             |                 |                    |              |        |                                      |                             |                                                                                           |

See succeeding run



UNITED STATES DEPARTMENT OF AGRICULTURE  
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 MONTH Apr. & May, 1935  
 SHEET 3 OF 10 PAGES

 PROJECT SCS Experiment Station, Taylor, Texas

## RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date       | Watershed |              |           | Rainfall        |                    |                 |                                     | Temperature (degrees F)     |                              | Run-off                      |         |         | Rainfall Means (inches) | Run (Acres)     | Conservation of Watershed         |
|------------|-----------|--------------|-----------|-----------------|--------------------|-----------------|-------------------------------------|-----------------------------|------------------------------|------------------------------|---------|---------|-------------------------|-----------------|-----------------------------------|
|            | Number    | Area (Acres) | Shape No. | Run-off (Acres) | Duration (minutes) | Amount (inches) | Maximum Intensity (inches per hour) | 8 minutes (inches per hour) | 16 minutes (inches per hour) | 30 minutes (inches per hour) | Minimum | Maximum | Excess (inches)         | Amount (inches) | Maximum Rate (Cu ft. sec. / min.) |
| (1)        | (2)       | (3)          | (4)       | (5)             | (6)                | (7)             | (8)                                 | (9)                         | (10)                         | (11)                         | (12)    | (13)    | (14)                    | (15)            | (16)                              |
| Apr. 10    | 3         | 7.94         | 2-F-Fb    |                 |                    | 0.78            |                                     |                             |                              |                              | 72      | 57      |                         |                 | Woods (Oaks) in full leaf         |
| Apr. 10    | 4         | 5.75         | 1-F-C     | 6:40AM          | 262                | 0.49            | 0.36                                | 0.28                        |                              |                              | 72      | 57      |                         |                 | Oats 12" in corn stubble          |
| Apr. 10    | 5         | 1.73         | 3-F-A     |                 |                    | 0.60            |                                     |                             |                              |                              | 72      | 57      |                         |                 | Corn 3", control strip bare       |
| Apr. 19    | 3         | 7.94         | 2         |                 |                    | 0.35            |                                     |                             |                              |                              | 79      | 61      |                         |                 | Woods (Oaks) in full leaf         |
| Apr. 19    | 4         | 5.75         | 1         | 1:20AM          | 310                | 0.34            | 0.20                                | 0.20                        |                              |                              | 79      | 61      |                         |                 | Oats 10" in corn stubble          |
| Apr. 19    | 5         | 1.73         | 3         |                 |                    | 0.35            |                                     |                             |                              |                              | 79      | 61      |                         |                 | Corn 4", control strip bare       |
| Apr. 20    | 3         | 7.94         | 2         |                 |                    | 0.75            |                                     |                             |                              |                              | 65      | 58      |                         |                 | Woods (Oaks) in full leaf         |
| Apr. 20    | 4         | 5.75         | 1         | 1:14PM          | 195                | 0.70            | 0.72                                | 0.46                        |                              |                              | 65      | 58      |                         |                 | Oats plowed under                 |
| Apr. 20    | 5         | 1.73         | 3         |                 |                    | 0.78            |                                     |                             |                              |                              | 65      | 58      |                         |                 | Corn 4", control strip bare       |
| Apr. 25-26 | 3         | 7.94         | 2         |                 |                    | 2.45            |                                     |                             |                              |                              | 83-80   | 66-61   |                         |                 | Woods (Oaks) in full leaf         |
| Apr. 25-26 | 4         | 5.75         | 1         | 6:38PM          | 850                | 2.33            | 2.16                                | 1.08                        | 0.88                         |                              | 83-80   | 66-61   |                         |                 | Bare, harvested April 24          |
| Apr. 25-26 | 5         | 1.73         | 3         |                 |                    | 2.17            |                                     |                             |                              |                              | 83-80   | 66-61   |                         |                 | Corn 5", control strip bare       |
| Apr. 28    | 3         | 7.94         | 2         |                 |                    | 0.55            |                                     |                             |                              |                              | 78      | 61      |                         |                 | Woods (Oaks) in full leaf         |
| Apr. 28    | 4         | 5.75         | 1         | 3:42PM          | 48                 | 0.50            | 1.56                                | 1.52                        | 0.96                         |                              | 78      | 61      |                         |                 | Bare                              |
| Apr. 28    | 5         | 1.73         | 3         |                 |                    | 0.53            |                                     |                             |                              |                              | 78      | 61      |                         |                 | Corn 5", control strip bare       |
| May 2      | 3         | 7.94         | 2         |                 |                    | 2.53            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 2      | 4         | 5.75         | 1         | 6:50AM          | 418                | 2.57            | 3.12                                | 2.74                        | 1.60                         |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 2      | 5         | 1.73         | 3         |                 |                    | 2.53            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 3-4    | 4         | 5.75         | 7-P-4     | 11:49AM         | 1050               | 0.95            |                                     |                             |                              |                              | 66      | 59      |                         |                 | Woods (Oaks) in full leaf         |
| May 4-5    | 4         | 5.75         | 1         | 11:47PM         | 545                | 1.89            | 1.08                                | 0.96                        | 0.88                         |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 5      | 4         | 5.75         | 1         |                 |                    | 2.05            |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 5      | 3         | 7.94         | 2         |                 |                    | Trace           |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 3         | 7.94         | 2         |                 |                    | 5.51            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 4         | 5.75         | 1         | 6:50AM          | 418                | 2.57            | 3.12                                | 2.74                        | 1.60                         |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 5         | 1.73         | 3         |                 |                    | 2.53            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 2      | 4         | 5.75         | 7-P-4     | 11:49AM         | 1050               | 0.95            |                                     |                             |                              |                              | 66      | 59      |                         |                 | Woods (Oaks) in full leaf         |
| May 3-4    | 4         | 5.75         | 1         | 11:47PM         | 545                | 1.89            | 1.08                                | 0.96                        | 0.88                         |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 4-5    | 4         | 5.75         | 1         |                 |                    | 2.05            |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 5      | 4         | 5.75         | 1         |                 |                    | Trace           |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 3         | 7.94         | 2         |                 |                    | 5.51            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 4         | 5.75         | 1         | 6:50AM          | 418                | 2.57            | 3.12                                | 2.74                        | 1.60                         |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 5         | 1.73         | 3         |                 |                    | 2.53            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 2      | 4         | 5.75         | 7-P-4     | 11:49AM         | 1050               | 0.95            |                                     |                             |                              |                              | 66      | 59      |                         |                 | Woods (Oaks) in full leaf         |
| May 3-4    | 4         | 5.75         | 1         | 11:47PM         | 545                | 1.89            | 1.08                                | 0.96                        | 0.88                         |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 4-5    | 4         | 5.75         | 1         |                 |                    | 2.05            |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 5      | 4         | 5.75         | 1         |                 |                    | Trace           |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 3         | 7.94         | 2         |                 |                    | 5.51            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 4         | 5.75         | 1         | 6:50AM          | 418                | 2.57            | 3.12                                | 2.74                        | 1.60                         |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 5         | 1.73         | 3         |                 |                    | 2.53            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 2      | 4         | 5.75         | 7-P-4     | 11:49AM         | 1050               | 0.95            |                                     |                             |                              |                              | 66      | 59      |                         |                 | Woods (Oaks) in full leaf         |
| May 3-4    | 4         | 5.75         | 1         | 11:47PM         | 545                | 1.89            | 1.08                                | 0.96                        | 0.88                         |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 4-5    | 4         | 5.75         | 1         |                 |                    | 2.05            |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 5      | 4         | 5.75         | 1         |                 |                    | Trace           |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 3         | 7.94         | 2         |                 |                    | 5.51            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 4         | 5.75         | 1         | 6:50AM          | 418                | 2.57            | 3.12                                | 2.74                        | 1.60                         |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 5         | 1.73         | 3         |                 |                    | 2.53            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 2      | 4         | 5.75         | 7-P-4     | 11:49AM         | 1050               | 0.95            |                                     |                             |                              |                              | 66      | 59      |                         |                 | Woods (Oaks) in full leaf         |
| May 3-4    | 4         | 5.75         | 1         | 11:47PM         | 545                | 1.89            | 1.08                                | 0.96                        | 0.88                         |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 4-5    | 4         | 5.75         | 1         |                 |                    | 2.05            |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 5      | 4         | 5.75         | 1         |                 |                    | Trace           |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 3         | 7.94         | 2         |                 |                    | 5.51            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 4         | 5.75         | 1         | 6:50AM          | 418                | 2.57            | 3.12                                | 2.74                        | 1.60                         |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 5         | 1.73         | 3         |                 |                    | 2.53            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 2      | 4         | 5.75         | 7-P-4     | 11:49AM         | 1050               | 0.95            |                                     |                             |                              |                              | 66      | 59      |                         |                 | Woods (Oaks) in full leaf         |
| May 3-4    | 4         | 5.75         | 1         | 11:47PM         | 545                | 1.89            | 1.08                                | 0.96                        | 0.88                         |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 4-5    | 4         | 5.75         | 1         |                 |                    | 2.05            |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 5      | 4         | 5.75         | 1         |                 |                    | Trace           |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 3         | 7.94         | 2         |                 |                    | 5.51            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 4         | 5.75         | 1         | 6:50AM          | 418                | 2.57            | 3.12                                | 2.74                        | 1.60                         |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 5         | 1.73         | 3         |                 |                    | 2.53            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 2      | 4         | 5.75         | 7-P-4     | 11:49AM         | 1050               | 0.95            |                                     |                             |                              |                              | 66      | 59      |                         |                 | Woods (Oaks) in full leaf         |
| May 3-4    | 4         | 5.75         | 1         | 11:47PM         | 545                | 1.89            | 1.08                                | 0.96                        | 0.88                         |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 4-5    | 4         | 5.75         | 1         |                 |                    | 2.05            |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 5      | 4         | 5.75         | 1         |                 |                    | Trace           |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 3         | 7.94         | 2         |                 |                    | 5.51            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 4         | 5.75         | 1         | 6:50AM          | 418                | 2.57            | 3.12                                | 2.74                        | 1.60                         |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 5         | 1.73         | 3         |                 |                    | 2.53            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 2      | 4         | 5.75         | 7-P-4     | 11:49AM         | 1050               | 0.95            |                                     |                             |                              |                              | 66      | 59      |                         |                 | Woods (Oaks) in full leaf         |
| May 3-4    | 4         | 5.75         | 1         | 11:47PM         | 545                | 1.89            | 1.08                                | 0.96                        | 0.88                         |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 4-5    | 4         | 5.75         | 1         |                 |                    | 2.05            |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 5      | 4         | 5.75         | 1         |                 |                    | Trace           |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 3         | 7.94         | 2         |                 |                    | 5.51            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 4         | 5.75         | 1         | 6:50AM          | 418                | 2.57            | 3.12                                | 2.74                        | 1.60                         |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 5         | 1.73         | 3         |                 |                    | 2.53            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 2      | 4         | 5.75         | 7-P-4     | 11:49AM         | 1050               | 0.95            |                                     |                             |                              |                              | 66      | 59      |                         |                 | Woods (Oaks) in full leaf         |
| May 3-4    | 4         | 5.75         | 1         | 11:47PM         | 545                | 1.89            | 1.08                                | 0.96                        | 0.88                         |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 4-5    | 4         | 5.75         | 1         |                 |                    | 2.05            |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 5      | 4         | 5.75         | 1         |                 |                    | Trace           |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 3         | 7.94         | 2         |                 |                    | 5.51            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 4         | 5.75         | 1         | 6:50AM          | 418                | 2.57            | 3.12                                | 2.74                        | 1.60                         |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 5         | 1.73         | 3         |                 |                    | 2.53            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 2      | 4         | 5.75         | 7-P-4     | 11:49AM         | 1050               | 0.95            |                                     |                             |                              |                              | 66      | 59      |                         |                 | Woods (Oaks) in full leaf         |
| May 3-4    | 4         | 5.75         | 1         | 11:47PM         | 545                | 1.89            | 1.08                                | 0.96                        | 0.88                         |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 4-5    | 4         | 5.75         | 1         |                 |                    | 2.05            |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 5      | 4         | 5.75         | 1         |                 |                    | Trace           |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 3         | 7.94         | 2         |                 |                    | 5.51            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 4         | 5.75         | 1         | 6:50AM          | 418                | 2.57            | 3.12                                | 2.74                        | 1.60                         |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 5         | 1.73         | 3         |                 |                    | 2.53            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 2      | 4         | 5.75         | 7-P-4     | 11:49AM         | 1050               | 0.95            |                                     |                             |                              |                              | 66      | 59      |                         |                 | Woods (Oaks) in full leaf         |
| May 3-4    | 4         | 5.75         | 1         | 11:47PM         | 545                | 1.89            | 1.08                                | 0.96                        | 0.88                         |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 4-5    | 4         | 5.75         | 1         |                 |                    | 2.05            |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 5      | 4         | 5.75         | 1         |                 |                    | Trace           |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 3         | 7.94         | 2         |                 |                    | 5.51            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 4         | 5.75         | 1         | 6:50AM          | 418                | 2.57            | 3.12                                | 2.74                        | 1.60                         |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 5         | 1.73         | 3         |                 |                    | 2.53            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 2      | 4         | 5.75         | 7-P-4     | 11:49AM         | 1050               | 0.95            |                                     |                             |                              |                              | 66      | 59      |                         |                 | Woods (Oaks) in full leaf         |
| May 3-4    | 4         | 5.75         | 1         | 11:47PM         | 545                | 1.89            | 1.08                                | 0.96                        | 0.88                         |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 4-5    | 4         | 5.75         | 1         |                 |                    | 2.05            |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 5      | 4         | 5.75         | 1         |                 |                    | Trace           |                                     |                             |                              |                              | 63      | 50      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 3         | 7.94         | 2         |                 |                    | 5.51            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 4         | 5.75         | 1         | 6:50AM          | 418                | 2.57            | 3.12                                | 2.74                        | 1.60                         |                              | 75      | 62      |                         |                 | Woods (Oaks) in full leaf         |
| May 7      | 5         | 1.73         | 3         |                 |                    | 2.53            |                                     |                             |                              |                              | 75      | 62      |                         |                 | Woods (Oaks) in full              |





# RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

W. B. GOVERNMENT PRINTING OFFICE 16-12308

02-61-91 / 100 • 100





MONTH June, 19 35  
SHEET 5 OF 10 SHEETS

# RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

Project 8CS Experiment Station, Tyler, Texas

| W. VERBENO |        |            | BLANKET  |                |                     |                                | TRANSDUCER (inches V)        |                              |             |               | HUR OFF         |              |         |                         | RAINFALL METER (inches)   |                                     | Soil Temp (total per sec)        |      | CONDITION OF WATERBUSH |  |
|------------|--------|------------|----------|----------------|---------------------|--------------------------------|------------------------------|------------------------------|-------------|---------------|-----------------|--------------|---------|-------------------------|---------------------------|-------------------------------------|----------------------------------|------|------------------------|--|
| Date       | Number | Time (sec) | Gate No. | Depth (inches) | Direction (minutes) | MAXIMUM FLOW (inches per hour) |                              |                              | Flow (hour) | Fitted (hour) | Annual (inches) | MAXIMUM RATE |         | RAINFALL METER (inches) | Soil Temp (total per sec) | CONDITION OF WATERBUSH              |                                  |      |                        |  |
|            |        |            |          |                |                     | 8 minutes (inches per hour)    | 16 minutes (inches per hour) | 30 minutes (inches per hour) |             |               |                 | Cur. R. per  | Thin    |                         |                           |                                     |                                  |      |                        |  |
| 1935       | (2)    | (3)        | (4)      | (5)            | (6)                 | (7)                            | (8)                          | (9)                          | (10)        | (11)          | (12)            | (13)         | (14)    | (15)                    | (16)                      | (17)                                | (18)                             | (19) |                        |  |
| June 13    | 3      | 7.94       | 2-F-Fb   |                |                     | •                              |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Woods (oaks) in full leaf        |      |                        |  |
| June 13    | 3      | 7.94       | 2-F-Fb   |                |                     | 0.07                           |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Woods (oaks) in full leaf        |      |                        |  |
| June 13    | 4      | 5.75       | 1-F-C    | 1.10PM         | 20                  | 0.03                           |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Cow peas 2"; fair stand          |      |                        |  |
| June 13    | 4      | 5.75       | 1-F-C    | 5.07PM         | 18                  | 0.03                           |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Cow peas 2"; fair stand          |      |                        |  |
| June 13    | 5      | 1.73       | 3-F-A    |                |                     | •                              |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Corn 5'; Redtop-sorghum-cow peas |      |                        |  |
| June 13    | 5      | 1.73       | 3-F-A    |                |                     | 0.05                           |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Corn 5'; Redtop-sorghum-cow peas |      |                        |  |
| June 14    | 3      | 7.94       | 2        |                |                     | •                              |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Woods (oaks) in full leaf        |      |                        |  |
| June 15    | 3      | 7.94       | 2        |                |                     | •                              |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Woods (oaks) in full leaf        |      |                        |  |
| June 15    | 3      | 7.94       | 2        |                |                     | 0.60                           |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Woods (oaks) in full leaf        |      |                        |  |
| June 14    | 4      | 5.75       | 1        |                |                     | 0.02                           |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Cow peas (plowed) 3"             |      |                        |  |
| une 15     | 4      | 5.75       | 1        | 1.07AM         | 130                 | 0.30                           |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Cow peas 3" (plowed June 14)     |      |                        |  |
| une 15     | 4      | 5.75       | 1        | 5.47AM         | 369                 | 0.29                           |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Cow peas 3" (plowed June 14)     |      |                        |  |
| une 14     | 5      | 1.73       | 3        |                |                     | •                              |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Corn 5'; sorghum & cow peas      |      |                        |  |
| une 15     | 5      | 1.73       | 3        |                |                     | •                              |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Corn 5'; sorghum & cow peas      |      |                        |  |
| une 15     | 5      | 1.73       | 3        |                |                     | 0.56                           |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Corn 5'; sorghum & cow peas      |      |                        |  |
| June 15    | 3      | 7.94       | 2        |                |                     | •                              |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Woods (oaks) in full leaf        |      |                        |  |
| June 15    | 3      | 7.94       | 2        |                |                     | •                              |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Woods (oaks) in full leaf        |      |                        |  |
| June 15    | 3      | 7.94       | 2        |                |                     | 0.19                           |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Woods (oaks) in full leaf        |      |                        |  |
| June 15    | 4      | 5.75       | 1        |                |                     | 0.07                           |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Cow peas (plowed June 14)        |      |                        |  |
| June 15    | 4      | 5.75       | 1        | 3.46PM         | 27                  | 0.04                           |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Cow peas (plowed June 14)        |      |                        |  |
| June 15    | 4      | 5.75       | 1        | 7.30PM         | 15                  | 0.05                           |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Cow peas (plowed June 14)        |      |                        |  |
| June 15    | 5      | 1.73       | 3        |                |                     | •                              |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Corn 5'; sorghum; cow peas       |      |                        |  |
| June 15    | 5      | 1.73       | 3        |                |                     | •                              |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Corn 5'; sorghum; cow peas       |      |                        |  |
| June 15    | 5      | 1.73       | 3        |                |                     | 0.18                           |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Corn 5'; sorghum; cow peas       |      |                        |  |
| June 17-18 | 3      | 7.94       | 2        |                |                     | 1.16                           |                              |                              | NRO         |               |                 |              |         |                         |                           |                                     | Woods (oaks) in full leaf        |      |                        |  |
| June 17-18 | 4      | 5.75       | 1        | 9.03PM         | 190                 | 1.15                           | 1.44                         | 0.94                         | 9.15PM      | 3.45AM        | 0.130           | 2.62         | 10.01PM | 1.02                    | 1.604                     | Cow peas 4" fair stand              |                                  |      |                        |  |
| June 17-18 | 5      | 1.73       | 3        |                |                     | 1.20                           |                              |                              | Silt box    |               | 0.036           |              |         | 1.164                   | 0.007                     | Corn 5'; sorghum; cow peas (plowed) |                                  |      |                        |  |

• See succeeding run



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH June & July, 1935  
 SHEET 6 OF 10 SHEETS

## RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

 PROJECT SCS Experiment Station, Tyler, Texas  
 S. S. SHERMAN/ALFRED GRUBB, JR.

| Date    | WATERSHED |              |         | RAINFALL          |                 |                             |                              |                              | TEMPERATURES (degrees F.) |         |             | RUN-OFF      |                 |                                  | Rainfall Means (inches) | Run Loss (tons per acre) | Condition of Watershed                                 |
|---------|-----------|--------------|---------|-------------------|-----------------|-----------------------------|------------------------------|------------------------------|---------------------------|---------|-------------|--------------|-----------------|----------------------------------|-------------------------|--------------------------|--------------------------------------------------------|
|         | Number    | Area (acres) | Use No. | Direction (miles) | Amount (inches) | 8 minutes (inches per hour) | 15 minutes (inches per hour) | 30 minutes (inches per hour) | Maximum                   | Minimum | Mean (hour) | Field (hour) | Amount (inches) | Maximum Rate (cu ft. sec. / in.) | Time                    |                          |                                                        |
| 1935    | (1)       | (2)          | (3)     | (4)               | (5)             | (6)                         | (7)                          | (8)                          | (9)                       | (10)    | (11)        | (12)         | (13)            | (14)                             | (15)                    | (16)                     | (17)                                                   |
| June 21 | 3         | 7.94         | 2-F-Fb  |                   |                 |                             | 0.15                         |                              | 89                        | 67      | NRO         |              |                 |                                  |                         |                          | Woods (oaks) in full leaf                              |
| June 21 | 3         | 7.94         | 2-F-Fb  |                   |                 |                             | 0.43                         |                              | 89                        | 67      | NRO         |              |                 |                                  |                         |                          | Woods (oaks) in full leaf                              |
| June 21 | 4         | 5.75         | 1-F-C   | 8:03AM            |                 |                             | 0.12                         | 0.32                         | 89                        | 67      | NRO         |              |                 |                                  |                         |                          | Cow peas 6", fair stand                                |
| June 21 | 4         | 5.75         | 1-F-C   | 5:06PM            |                 |                             | 0.42                         | 0.92                         | 89                        | 67      | 7:21PM      | 10:05PM      | 0.053           | 1.24                             | 7:22PM                  | 0.367                    | Cow peas 6", fair stand                                |
| June 21 | 5         | 1.73         | 3-F-A   |                   |                 |                             | 0.10                         |                              | 89                        | 67      | NRO         |              |                 |                                  |                         |                          | Corn 6", sorghum; cow peas                             |
| June 21 | 5         | 1.73         | 3-F-A   |                   |                 |                             | 0.46                         |                              | 89                        | 67      | NRO         |              |                 |                                  |                         |                          | Corn 6", sorghum; cow peas                             |
| July 2  | 3         | 7.94         | 2       |                   |                 |                             | 0.60                         |                              | 93                        | 71      | NRO         |              |                 |                                  |                         |                          | Woods (oaks) in full leaf                              |
| July 2  | 4         | 5.75         | 1       | 5:07PM            |                 |                             | 0.64                         | 2.28                         | 93                        | 71      | 8:11PM      |              | 0.010           | No rate                          |                         | 0.040                    | Cow peas (plowed June 28)                              |
| July 2  | 5         | 1.73         | 3       |                   |                 |                             | 0.43                         |                              | 93                        | 71      | NRO         |              |                 |                                  |                         |                          | Corn (hood June 28) sorghum; cow peas (plowed June 29) |
| July 3  | 3         | 7.94         | 2       |                   |                 |                             | 1.52                         |                              | 90                        | 71      | 5:33PM      | 6:24PM       | 0.013           | 0.35                             | 5:46PM                  | 1.507                    | Woods (oaks) in full leaf                              |
| July 3  | 4         | 5.75         | 1       | 4:59PM            |                 |                             | 1.77                         | 4.20                         | 90                        | 71      | 5:16PM      | 6:25PM       | 0.066           | 23.06                            | 5:35PM                  | 15.599                   | Cow peas 12", fair stand                               |
| July 3  | 5         | 1.73         | 3       |                   |                 |                             | 1.74                         |                              | 90                        | 71      | 5:20PM      | 6:45PM       | 0.528           | 2.62                             | 5:43PM                  | 1.212                    | Strip cropped corn 7", sorghum & cow peas              |
| July 11 | 3         | 7.94         | 2       |                   |                 |                             | 0.08                         |                              | 93                        | 75      | NRO         |              |                 |                                  |                         |                          | Woods (oaks) in full leaf                              |
| July 11 | 4         | 5.75         | 1       | 1:12PM            |                 |                             | 0.15                         |                              | 93                        | 75      | NRO         |              |                 |                                  |                         |                          | Cow peas 16", cultivated                               |
| July 11 | 5         | 1.73         | 3       |                   |                 |                             | 0.22                         |                              | 93                        | 75      | NRO         |              |                 |                                  |                         |                          | Corn 7", sorghum; cow peas                             |
| July 12 | 3         | 7.94         | 2       |                   |                 |                             | 0.01                         |                              | 95                        | 72      | NRO         |              |                 |                                  |                         |                          | Woods (oaks) in full leaf                              |
| July 12 | 4         | 5.75         | 1       |                   |                 |                             | 0.01                         |                              | 95                        | 72      | NRO         |              |                 |                                  |                         |                          | Cow peas 16", cultivated July 11                       |
| July 12 | 5         | 1.73         | 3       |                   |                 |                             | 0.02                         |                              | 95                        | 72      | NRO         |              |                 |                                  |                         |                          | Corn 7", sorghum; cow peas                             |
| July 16 | 3         | 7.94         | 2       |                   |                 |                             | 0.02                         |                              | 92                        | 69      | NRO         |              |                 |                                  |                         |                          | Woods (oaks) in full leaf                              |
| July 16 | 4         | 5.75         | 1       |                   |                 |                             | 0.01                         |                              | 92                        | 69      | NRO         |              |                 |                                  |                         |                          | Cow peas 18", fair stand                               |
| July 16 | 5         | 1.73         | 3       |                   |                 |                             | 0.02                         |                              | 92                        | 69      | NRO         |              |                 |                                  |                         |                          | Corn 7", sorghum; cow peas                             |
| July 21 | 3         | 7.94         | 2       |                   |                 |                             | 0.67                         |                              | 94                        | 73      | NRO         |              |                 |                                  |                         |                          | Woods (oaks) in full leaf                              |
| July 21 | 4         | 5.75         | 1       | 1:52PM            |                 |                             | 0.70                         | 2.00                         | 94                        | 73      | 2:15PM      | 3:13PM       | 0.055           | 0.18                             | 2:23PM                  | 1.484                    | Cow peas 22", fair stand                               |
| July 21 | 5         | 1.73         | 3       |                   |                 |                             | 1.03                         | 4.34                         | 94                        | 73      | 8:11PM      |              | 0.060           | No rate                          |                         | 0.012                    | Corn 7", sorghum; cow peas                             |
| July 23 | 3         | 7.94         | 2       |                   |                 |                             | 0                            |                              | 80                        | 74      | NRO         |              |                 |                                  |                         |                          | Woods (oaks) in full leaf                              |
| July 23 | 3         | 7.94         | 2       |                   |                 |                             | 0.05                         |                              | 88                        | 74      | NRO         |              |                 |                                  |                         |                          | Woods (oaks) in full leaf                              |

\*See Succeeding rain





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH July, Aug. & Sept., 1935

 SHEET 7 OF 10 SHEETS

 PROJECT SCS Experiment Station, Cleer, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date    | Watershed |              | Rainfall |              |                    |                 |                             |                              | Temperature (degrees F.)     |         | Run-off      |              |                 |              | Harvested Moisture (inches) | Dry Load (tons per acre) | Condition of Watershed                            |      |
|---------|-----------|--------------|----------|--------------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|---------|--------------|--------------|-----------------|--------------|-----------------------------|--------------------------|---------------------------------------------------|------|
|         | Number    | Area (acres) | Gage No. | Begin (hour) | Duration (minutes) | Amount (inches) | Maximum Intensity           |                              |                              | Minimum | Begin (hour) | Ended (hour) | Amount (inches) | Maximum Rate |                             |                          |                                                   |      |
|         |           |              |          |              |                    |                 | 5 minutes (inches per hour) | 15 minutes (inches per hour) | 30 minutes (inches per hour) |         |              |              |                 | Cu ft. sec.  |                             |                          |                                                   | Time |
| 1935    | (2)       | (3)          | (4)      | (5)          | (6)                | (7)             | (8)                         | (9)                          | (10)                         | (11)    | (12)         | (13)         | (14)            | (15)         | (16)                        | (17)                     | (18)                                              |      |
| July 23 | 4         | 5.75         | 1-F-C    |              |                    | 0.02            |                             |                              |                              | 74      | NRD          |              |                 |              |                             |                          | Cow peas 24", fair stand                          |      |
| July 23 | 4         | 5.75         | 1-F-C    |              |                    | 0.03            |                             |                              |                              | 74      | NRD          |              |                 |              |                             |                          | Cow peas 24", fair stand                          |      |
| July 23 | 5         | 1.73         | 3-F-A    |              |                    | *               |                             |                              |                              | 74      | NRD          |              |                 |              |                             |                          | Corn 7' sorghum, cow peas                         |      |
| July 23 | 5         | 1.73         | 3-F-A    |              |                    | 0.09            |                             |                              |                              | 74      | NRD          |              |                 |              |                             |                          | Corn 7' sorghum, cow peas                         |      |
| July 26 | 3         | 7.94         | 2-F-B    |              |                    | 0.22            |                             |                              |                              | 95      | NRD          |              |                 |              |                             |                          | Woods (oaks) in full leaf                         |      |
| July 26 | 4         | 5.75         | 1-F-C    |              |                    | 0.23            |                             |                              |                              | 95      | NRD          |              |                 |              |                             |                          | Cow peas 24", fair stand                          |      |
| July 26 | 5         | 1.73         | 3-F-A    |              |                    | 0.24            |                             |                              |                              | 95      | NRD          |              |                 |              |                             |                          | Corn 7' sorghum, cow peas                         |      |
| Aug. 13 | 3         | 7.94         | 2        |              |                    | 0.21            |                             |                              |                              | 90      | NRD          |              |                 |              |                             |                          | Woods (oaks) in full leaf                         |      |
| Aug. 13 | 4         | 5.75         | 1        |              |                    | 0.17            |                             |                              |                              | 90      | NRD          |              |                 |              |                             |                          | Cow peas (seed harvested Aug. 6)                  |      |
| Aug. 13 | 5         | 1.73         | 3        |              | 42                 | 0.15            |                             |                              |                              | 90      | NRD          |              |                 |              |                             |                          | Corn 7' sorghum, cow peas (seed harvested Aug. 6) |      |
| Aug. 14 | 3         | 7.94         | 2        |              |                    | 1.11            |                             |                              |                              | 72      | NRD          |              |                 |              |                             |                          | Woods (oaks) in full leaf                         |      |
| Aug. 14 | 4         | 5.75         | 1        |              |                    | 1.09            |                             |                              |                              | 72      | 6:11 AM      | 7:20 AM      | 0.17 B          | 4:51         | 6:27 AM                     | 0.912                    | Cow pea vines 24"                                 |      |
| Aug. 14 | 5         | 1.73         | 3        |              | 250                | 1.03            |                             |                              |                              | 72      | NRD          |              |                 |              |                             |                          | Strip cropped corn 7' sorghum & vines             |      |
| Aug. 21 | 3         | 7.94         | 2        |              |                    | 0.02            |                             |                              |                              | 96      | NRD          |              |                 |              |                             |                          | Woods (oaks) in full leaf                         |      |
| Aug. 21 | 4         | 5.75         | 1        |              |                    | 0.02            |                             |                              |                              | 96      | NRD          |              |                 |              |                             |                          | Cow pea vines 24"                                 |      |
| Aug. 21 | 5         | 1.73         | 3        |              |                    | 0.02            |                             |                              |                              | 96      | NRD          |              |                 |              |                             |                          | Corn 7' sorghum, cow peas                         |      |
| Aug. 29 | 3         | 7.94         | 2        |              |                    | 0.03            |                             |                              |                              | 93      | NRD          |              |                 |              |                             |                          | Woods (oaks) in full leaf                         |      |
| Aug. 29 | 4         | 5.75         | 1        |              |                    | 0.03            |                             |                              |                              | 93      | NRD          |              |                 |              |                             |                          | Cow pea vines 24"                                 |      |
| Aug. 29 | 5         | 1.73         | 3        |              |                    | 0.04            |                             |                              |                              | 93      | NRD          |              |                 |              |                             |                          | Corn 7' sorghum, cow peas                         |      |
| Sept. 2 | 3         | 7.94         | 2        |              |                    | 0.02            |                             |                              |                              | 92      | NRD          |              |                 |              |                             |                          | Woods (oaks) in full leaf                         |      |
| Sept. 2 | 4         | 5.75         | 1        |              |                    | 0.03            |                             |                              |                              | 92      | NRD          |              |                 |              |                             |                          | Cow pea vines plowed under                        |      |
| Sept. 2 | 5         | 1.73         | 3        |              |                    | 0.03            |                             |                              |                              | 92      | NRD          |              |                 |              |                             |                          | Strip cropped corn, sorghum, vines                |      |
| Sept. 4 | 3         | 7.94         | 2        |              |                    | 0.35            |                             |                              |                              | 70      | NRD          |              |                 |              |                             |                          | Woods (oaks) in full leaf                         |      |
| Sept. 4 | 4         | 5.75         | 1        |              |                    | 0.38            |                             |                              |                              | 70      | NRD          |              |                 |              |                             |                          | Bare; plowed Sept. 2                              |      |
| Sept. 4 | 5         | 1.73         | 3        |              | 85                 | 0.39            |                             |                              | 0.46                         | 70      | NRD          |              |                 |              |                             |                          | Corn 7' sorghum & cow pea vines                   |      |
| Sept. 8 | 3         | 7.94         | 2        |              |                    | *               |                             |                              |                              | 89      | NRD          |              |                 |              |                             |                          | Woods (oaks) in full leaf                         |      |
| Sept. 8 | 4         | 5.75         | 1        |              |                    | 0.14            |                             |                              |                              | 89      | NRD          |              |                 |              |                             |                          | Bare                                              |      |
| Sept. 8 | 5         | 1.73         | 3        |              |                    | *               |                             |                              |                              | 89      | NRD          |              |                 |              |                             |                          | Corn dormant; sorghum & vines                     |      |

\*See succeeding page

Cow peas 24", fair stand  
 Cow peas 24", fair stand  
 Corn 7' sorghum, cow peas  
 Corn 7' sorghum, cow peas  
 Woods (oaks) in full leaf  
 Cow peas 24", fair stand  
 Corn 7' sorghum, cow peas  
 Woods (oaks) in full leaf  
 Cow peas (seed harvested Aug. 6)  
 Corn, sorghum, cow peas (seed harvested Aug. 6)  
 Woods (oaks) in full leaf  
 Cow pea vines 24"  
 Strip cropped, corn 7' sorghum & vines  
 Woods (oaks) in full leaf  
 Cow pea vines 24"  
 Corn 7' sorghum, cow peas  
 Woods (oaks) in full leaf  
 Cow pea vines 24"  
 Corn 7' sorghum, cow peas  
 Woods (oaks) in full leaf  
 Cow pea vines 24"  
 Strip cropped, corn, sorghum, vines  
 Woods (oaks) in full leaf  
 Bare, plowed Sept. 2  
 Corn 7' sorghum & cow pea vines  
 Woods (oaks) in full leaf  
 Bare  
 Corn dormant, sorghum & vines



RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

Project SCS Experiment Station, Tyler, Texas  
Month Sept. & Oct., 1935  
Sheet 8 of 10  
NINETEEN

| Date     | Watershed |              | Rainfall     |                    |                 |                                        | Temperature (Fahrenheit)               |                | Run-off        |              |            |                | Run-off<br>(cords per acre) | Condition of Watershed        |
|----------|-----------|--------------|--------------|--------------------|-----------------|----------------------------------------|----------------------------------------|----------------|----------------|--------------|------------|----------------|-----------------------------|-------------------------------|
|          | Number    | Area (acres) | Begin (hour) | Duration (minutes) | Amount (inches) | Maximum Intensity<br>(inches per hour) | Minimum Intensity<br>(inches per hour) | Maximum<br>(F) | Minimum<br>(F) | Begin (hour) | End (hour) | Amount (cords) | Time                        |                               |
| 1935     | (1)       | (2)          | (3)          | (4)                | (5)             | (6)                                    | (7)                                    | (8)            | (9)            | (10)         | (11)       | (12)           | (13)                        | (14)                          |
| Sept. 9  | 3         | 7.94         | 2-F-Fb       |                    | 0.96            |                                        |                                        | 65             | 68             | NRO          |            |                |                             | Woods (oaks) in full leaf     |
| Sept. 9  | 3         | 7.94         | 2-F-Fb       |                    | 0.44            |                                        |                                        | 65             | 68             | NRO          |            |                |                             | Woods (oaks) in full leaf     |
| Sept. 9  | 4         | 5.75         | 1-F-C 4:04AM | 225                | 0.73            | 0.40                                   | 0.32                                   | 65             | 68             | NRO          |            |                |                             | Bare                          |
| Sept. 9  | 4         | 5.75         | 1-F-C 4:41PM | 72                 | 0.39            | 0.32                                   | 0.46                                   | 65             | 68             | NRO          |            |                |                             | Bare                          |
| Sept. 9  | 5         | 1.73         | 3-F-A        |                    | 0.91            |                                        |                                        | 65             | 68             | NRO          |            |                |                             | Corn; sorghum & vines         |
| Sept. 9  | 5         | 1.73         | 3-F-A        |                    | 0.46            |                                        |                                        | 65             | 68             | NRO          |            |                |                             | Corn; sorghum & vines         |
| Sept. 24 | 3         | 7.94         | 2            |                    |                 |                                        |                                        | 66             | 67             | NRO          |            |                |                             | Woods (oaks) in full leaf     |
| Sept. 24 | 3         | 7.94         | 2            |                    |                 |                                        |                                        | 66             | 67             | NRO          |            |                |                             | Woods (oaks) in full leaf     |
| Sept. 24 | 3         | 7.94         | 2            |                    |                 |                                        |                                        | 66             | 67             | NRO          |            |                |                             | Woods (oaks) in full leaf     |
| Sept. 24 | 4         | 5.75         | 1 11:15AM    | 27                 | 0.68            |                                        |                                        | 66             | 67             | NRO          |            |                |                             | Oats (planted Sept. 16, 1935) |
| Sept. 24 | 4         | 5.75         | 1 12:15PM    | 15                 | 0.02            |                                        |                                        | 66             | 67             | NRO          |            |                |                             | Oats (planted Sept. 16, 1935) |
| Sept. 24 | 4         | 5.75         | 1 3:42PM     | 108                | 0.44            | 1.20                                   | 0.60                                   | 66             | 67             | NRO          |            |                |                             | Oats (planted Sept. 16, 1935) |
| Sept. 24 | 5         | 1.73         | 3            |                    |                 |                                        |                                        | 65             | 67             | NRO          |            |                |                             | Corn; sorghum & vines         |
| Sept. 24 | 5         | 1.73         | 3            |                    |                 |                                        |                                        | 66             | 67             | NRO          |            |                |                             | Corn; sorghum & vines         |
| Sept. 24 | 5         | 1.73         | 3            |                    |                 |                                        |                                        | 66             | 67             | NRO          |            |                |                             | Corn; sorghum & vines         |
| Sept. 25 | 3         | 7.94         | 2            |                    | 0.73            |                                        |                                        | 77             | 68             | NRO          |            |                |                             | Woods (oaks) in full leaf     |
| Sept. 25 | 4         | 5.75         | 1 11:21PM    | 39                 | 0.21            | 0.60                                   | 0.26                                   | 77             | 68             | NRO          |            |                |                             | Oats up, good stand           |
| Sept. 25 | 5         | 1.73         | 3            |                    | 0.80            |                                        |                                        | 77             | 68             | NRO          |            |                |                             | Corn; sorghum & vines         |
| Sept. 26 | 3         | 7.94         | 2            |                    |                 |                                        |                                        | 80             | 71             | NRO          |            |                |                             | Woods (oaks) in full leaf     |
| Sept. 26 | 3         | 7.94         | 2            |                    | 0.46            |                                        |                                        | 80             | 71             | NRO          |            |                |                             | Woods (oaks) in full leaf     |
| Sept. 26 | 4         | 5.75         | 1 2:00AM     | 44                 | 0.10            |                                        |                                        | 80             | 71             | NRO          |            |                |                             | Oats; good stand              |
| Sept. 26 | 4         | 5.75         | 1 6:13AM     | 159                | 0.40            | 1.32                                   | 0.56                                   | 80             | 71             | NRO          |            |                |                             | Oats; good stand              |
| Sept. 26 | 5         | 1.73         | 3            |                    |                 |                                        |                                        | 80             | 71             | NRO          |            |                |                             | Corn dormant; sorghum & vines |
| Sept. 26 | 5         | 1.73         | 3            |                    | 0.55            |                                        |                                        | 80             | 71             | NRO          |            |                |                             | Corn dormant; sorghum & vines |
| Sept. 26 | 3         | 7.94         | 2            |                    | 0.54            |                                        |                                        | 80             | 71             | NRO          |            |                |                             | Woods (oaks) in full leaf     |
| Sept. 26 | 4         | 5.75         | 1 4:13PM     | 83                 | 0.61            | 1.84                                   | 1.04                                   | 80             | 71             | NRO          |            | 0.014          | NO RUN                      | Oats; good stand              |
| Sept. 26 | 5         | 1.73         | 3            |                    | 0.55            |                                        |                                        | 80             | 71             | NRO          |            |                |                             | Corn dormant; sorghum & vines |
| Oct. 10  | 3         | 7.94         | 2            |                    | 0.50            |                                        |                                        | 77             | 62             | NRO          |            |                |                             | Woods (oaks) in full leaf     |
| Oct. 10  | 3         | 7.94         | 2            |                    | 0.03            |                                        |                                        | 77             | 62             | NRO          |            |                |                             | Woods (oaks) in full leaf     |

\*See preceding page for rain

100-1500



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH Oct. & Nov., 1935  
 SHEET 9 OF 10 SHEETS

 PROJECT SCS Experiment Station, Tyler, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date    | Watershed |                 | Rainfall |                |                       |                    |                                |                                 |                                 |         |         |                  | Temperature<br>(degrees F) |                    | Runoff       |       |       |                                                                         | Barrel-Meters<br>(inches) | Dry Loss<br>(tons per acre) | Condition of Watershed |
|---------|-----------|-----------------|----------|----------------|-----------------------|--------------------|--------------------------------|---------------------------------|---------------------------------|---------|---------|------------------|----------------------------|--------------------|--------------|-------|-------|-------------------------------------------------------------------------|---------------------------|-----------------------------|------------------------|
|         | Number    | Area<br>(acres) | Gage No. | Time<br>(hour) | Duration<br>(minutes) | Amount<br>(inches) | Maximum Intensity              |                                 |                                 | Maximum | Minimum | Inches<br>(hour) | Feet<br>(hour)             | Amount<br>(inches) | Maximum Rate |       |       |                                                                         |                           |                             |                        |
|         |           |                 |          |                |                       |                    | 4 minutes<br>(inches per hour) | 15 minutes<br>(inches per hour) | 30 minutes<br>(inches per hour) |         |         |                  |                            |                    | Cu ft sec    | Time  |       |                                                                         |                           |                             |                        |
| 1935    | (1)       | (2)             | (3)      | (4)            | (5)                   | (6)                | (7)                            | (8)                             | (9)                             | (10)    | (11)    | (12)             | (13)                       | (14)               | (15)         | (16)  | (17)  | (18)                                                                    |                           |                             |                        |
| Oct. 10 | 4         | 5.75            | 1-F-C    | 1:17AM         | 265                   | 0.48               | 0.60                           | 0.24                            | 0.34                            | 77      | 62      | NRO              |                            |                    |              |       |       |                                                                         |                           |                             |                        |
| Oct. 10 | 4         | 5.75            | 1-F-C    | 2:57PM         | 29                    | 0.06               |                                |                                 |                                 | 77      | 62      | NRO              |                            |                    |              |       |       | Octa 1"-2" good stand<br>Octa 1"-2" good stand                          |                           |                             |                        |
| Oct. 10 | 5         | 1.73            | 3-F-A    |                |                       | 0.50               |                                |                                 |                                 | 77      | 62      | NRO              |                            |                    |              |       |       | Bare (crop harvested, Oct. 1)                                           |                           |                             |                        |
| Oct. 10 | 5         | 1.73            | 3-F-A    |                |                       | 0.13               |                                |                                 |                                 | 77      | 62      | NRO              |                            |                    |              |       |       | Bare (crop harvested, Oct. 1)                                           |                           |                             |                        |
| Oct. 18 | 3         | 7.94            | 2-F-Fb   |                |                       | •                  |                                |                                 |                                 | 80      | 57      | NRO              |                            |                    |              |       |       | Woods (oaks) in full leaf                                               |                           |                             |                        |
| Oct. 18 | 3         | 7.94            | 2-F-Fb   |                |                       | 0.40               |                                |                                 |                                 | 80      | 57      | NRO              |                            |                    |              |       |       | Woods (oaks) in full leaf                                               |                           |                             |                        |
| Oct. 18 | 4         | 5.75            | 1        | 2:42PM         | 13                    | 0.06               |                                |                                 |                                 | 80      | 57      | NRO              |                            |                    |              |       |       | Octa 1"-2" good stand                                                   |                           |                             |                        |
| Oct. 18 | 4         | 5.75            | 1        | 4:41PM         | 57                    | 0.36               | 0.96                           | 0.52                            | 0.52                            | 80      | 57      | NRO              |                            |                    |              |       |       | Octa 1"-2" good stand                                                   |                           |                             |                        |
| Oct. 18 | 5         | 1.73            | 3        |                |                       | •                  |                                |                                 |                                 | 80      | 57      | NRO              |                            |                    |              |       |       | Bare (crop harvested, Oct. 1)                                           |                           |                             |                        |
| Oct. 18 | 5         | 1.73            | 3        |                |                       | 0.42               |                                |                                 |                                 | 80      | 57      | NRO              |                            |                    |              |       |       | Bare (crop harvested, Oct. 1)<br>during winter by removal of<br>bermuda |                           |                             |                        |
| Oct. 22 | 3         | 7.94            | 2        |                |                       | •                  |                                |                                 |                                 | 88      | 72      | NRO              |                            |                    |              |       |       | Woods (oaks) in full leaf                                               |                           |                             |                        |
| Oct. 22 | 4         | 5.75            | 1        | 7:11PM         | 276                   | 1.06               | 1.20                           | 0.80                            | 0.68                            | 88      | 72      | NRO              |                            |                    |              |       |       | Octa 1"-2" good stand                                                   |                           |                             |                        |
| Oct. 22 | 5         | 1.73            | 3        |                |                       | •                  |                                |                                 |                                 | 88      | 72      | NRO              |                            |                    |              |       |       | Bare                                                                    |                           |                             |                        |
| Oct. 23 | 3         | 7.94            | 2        |                |                       | 2.12               |                                |                                 |                                 | 82      | 49      | NRO              |                            |                    |              |       |       | Woods (oaks) in full leaf                                               |                           |                             |                        |
| Oct. 23 | 4         | 5.75            | 1        | 4:35AM         | 962                   | 0.72               | 0.24                           | 0.20                            | 0.18                            | 82      | 49      | NRO              |                            |                    |              |       |       | Octa 1"-2" good stand                                                   |                           |                             |                        |
| Oct. 23 | 5         | 1.73            | 3        |                |                       | 1.67               |                                |                                 |                                 | 82      | 49      | NRO              |                            |                    |              |       |       | Bare                                                                    |                           |                             |                        |
| Oct. 27 | 3         | 7.94            | 2        |                |                       | 3.18               | 2.64                           | 2.04                            | 1.66                            | 72      | 61      | 7:52AM 9:58AM    | 0.627                      | 0.27               | 8:35AM       | 3.153 | 0.606 | Woods (oaks) in full leaf                                               |                           |                             |                        |
| Oct. 27 | 4         | 5.75            | 1        | 12:26AM        | 700                   | 3.29               |                                |                                 |                                 | 72      | 61      | 7:05AM 11:10AM   | 1.188                      | 6.22               | 7:52AM       | 2.102 | 5.330 | Octa 2" good stand                                                      |                           |                             |                        |
| Oct. 27 | 5         | 1.73            | 3        |                |                       | 3.30               |                                |                                 |                                 | 72      | 61      | 7:03AM 11:00AM   | 0.944                      | 1.24               | 8:30AM       | 2.356 | 0.119 | Bare                                                                    |                           |                             |                        |
| Oct. 30 | 3         | 7.94            | 2        |                |                       | 0.10               |                                |                                 |                                 | 78      | 65      | NRO              |                            |                    |              |       |       | Woods (oaks) in full leaf                                               |                           |                             |                        |
| Oct. 30 | 4         | 5.75            | 1        |                |                       | 0.11               |                                |                                 |                                 | 78      | 65      | NRO              |                            |                    |              |       |       | Octa 2" good stand                                                      |                           |                             |                        |
| Oct. 30 | 5         | 1.73            | 3        |                |                       | 0.13               |                                |                                 |                                 | 78      | 65      | NRO              |                            |                    |              |       |       | Bare                                                                    |                           |                             |                        |
| Nov. 1  | 3         | 7.94            | 2        |                |                       | 0.27               | 0.96                           | 0.60                            | 0.30                            | 73      | 65      | NRO              |                            |                    |              |       |       | Woods (oaks) in full leaf                                               |                           |                             |                        |
| Nov. 1  | 4         | 5.75            | 1        |                |                       | 0.26               |                                |                                 |                                 | 73      | 65      | NRO              |                            |                    |              |       |       | Octa 2" good stand                                                      |                           |                             |                        |
| Nov. 1  | 5         | 1.73            | 3        |                |                       | 0.24               |                                |                                 |                                 | 73      | 65      | NRO              |                            |                    |              |       |       | Bare bermuda roots removed                                              |                           |                             |                        |
| Nov. 4  | 3         | 7.94            | 2        |                |                       | 0.48               | 1.32                           | 0.76                            | 0.44                            | 76      | 52      | NRO              |                            |                    |              |       |       | Woods (oaks) partially removed                                          |                           |                             |                        |
| Nov. 4  | 4         | 5.75            | 1        |                |                       | 0.46               |                                |                                 |                                 | 76      | 52      | SLT box          | 0.045                      |                    |              |       |       | Octa 2" good stand                                                      |                           |                             |                        |
| Nov. 4  | 5         | 1.73            | 3        |                |                       | 0.45               |                                |                                 |                                 | 76      | 52      | NRO              |                            |                    |              |       |       | Bare                                                                    |                           |                             |                        |

\* See succeeding page





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH Nov. & Dec. 1935  
 SHEET 10 OF 10 SHEETS

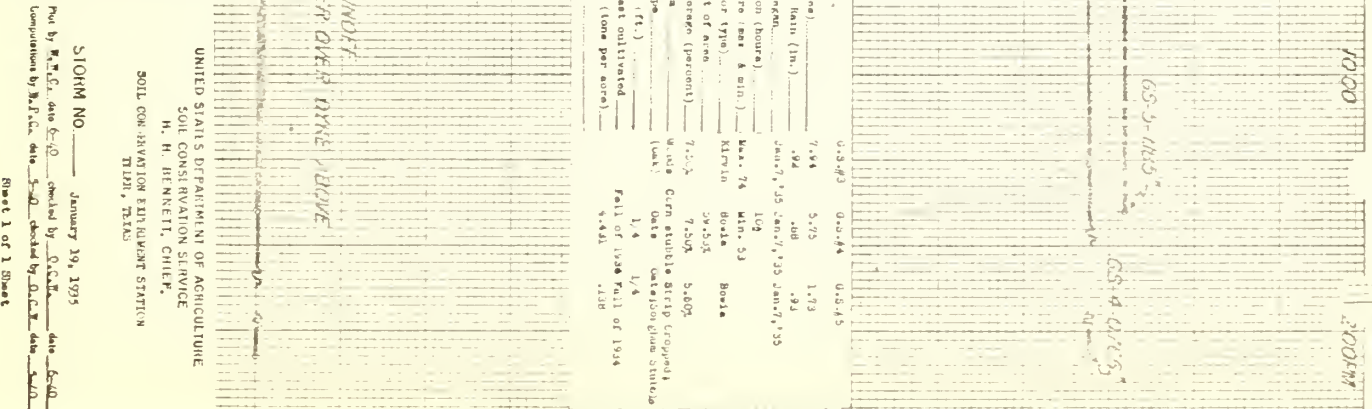
 PROJECT 565 Experiment Station, Tyler, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date              | Number | Area (acres) | Gage No. | Height (feet) | Duration (minutes) | Amount (inches) | Maximum Intensity           |                              |                              | Temperature (degrees F) |         | Run-off      |            | Rainfall (inches) | Run-off (cfs per acre) | Remarks                        |
|-------------------|--------|--------------|----------|---------------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|-------------------------|---------|--------------|------------|-------------------|------------------------|--------------------------------|
|                   |        |              |          |               |                    |                 | 8 minutes (inches per hour) | 16 minutes (inches per hour) | at maximum (inches per hour) | Maximum                 | Minimum | Begin (hour) | End (hour) |                   |                        |                                |
| Nov. 6 1935       | 3      | 7.94         | 2-F-Fb   |               |                    | 0.02            |                             |                              |                              | 52                      | 46      | NRO          |            |                   |                        | Woods (oaks) partially dormant |
| Nov. 6            | 3      | 7.94         | 2-F-Fb   |               |                    | 0.11            |                             |                              |                              | 52                      | 46      | NRO          |            |                   |                        | Woods (oaks) partially dormant |
| Nov. 6            | 4      | 5.75         | 1-F-C    |               |                    | 0.02            |                             |                              |                              | 52                      | 46      | NRO          |            |                   |                        | Woods (oaks) partially dormant |
| Nov. 6            | 4      | 5.75         | 1-F-C    |               |                    | 0.12            |                             |                              |                              | 52                      | 46      | NRO          |            |                   |                        | Woods (oaks) partially dormant |
| Nov. 6            | 5      | 1.73         | 2-F-A    |               |                    | 0.03            |                             |                              |                              | 52                      | 46      | NRO          |            |                   |                        | Woods (oaks) partially dormant |
| Nov. 6            | 5      | 1.73         | 2-F-A    |               |                    | 0.13            |                             |                              |                              | 52                      | 46      | NRO          |            |                   |                        | Woods (oaks) partially dormant |
| Nov. 9-10-11 1935 | 3      | 7.94         | 2        |               |                    | 2.16            |                             |                              |                              | 59-76                   | 69-90   | 7:14PM       | 9:55PM     | 0.027             | 0.037                  | Woods (oaks) partially dormant |
| Nov. 9-10-11 4    | 5.75   | 1            | 2-4-11M  |               | 2151               | 1.93            | 4.80                        | 1.76                         | 1.12                         | 59-76                   | 69-90   | 7:15PM       | 9:55PM     | 0.066             | 0.066                  | Woods (oaks) partially dormant |
| Nov. 9-10-11 5    | 1.73   | 3            |          |               |                    | 1.88            |                             |                              |                              | 59-76                   | 69-90   | 7:15PM       | 9:55PM     | 0.734             | 0.734                  | Woods (oaks) partially dormant |
| Nov. 11-12 1935   | 3      | 7.94         | 2        |               |                    | 0.43            |                             |                              |                              | 79                      | 40      | NRO          |            |                   |                        | Woods (oaks) partially dormant |
| Nov. 11-12 4      | 5.75   | 1            |          |               |                    | 0.41            |                             |                              |                              | 79                      | 40      | NRO          |            |                   |                        | Woods (oaks) partially dormant |
| Nov. 11-12 5      | 1.73   | 3            |          |               |                    | 0.45            |                             |                              |                              | 79                      | 40      | NRO          |            |                   |                        | Woods (oaks) partially dormant |
| Nov. 26           | 3      | 7.94         | 2        |               |                    | 1.06            |                             |                              |                              | 58                      | 54      | 4:25PM       | 6:45PM     | 0.108             | 1.57                   | Woods (oaks) dormant           |
| Nov. 26           | 4      | 5.75         | 1        |               |                    | 0.92            |                             |                              |                              | 58                      | 54      | 4:25PM       | 6:45PM     | 0.108             | 1.57                   | Woods (oaks) dormant           |
| Nov. 26           | 5      | 1.73         | 3        |               |                    | 0.63            |                             |                              |                              | 58                      | 54      | 4:25PM       | 6:45PM     | 0.108             | 1.57                   | Woods (oaks) dormant           |
| Dec. 3            | 3      | 7.94         | 2        |               |                    | 0.16            |                             |                              |                              | 47                      | 37      | NRO          |            |                   |                        | Woods (oaks) dormant           |
| Dec. 3            | 4      | 5.75         | 1        |               |                    | 0.16            |                             |                              |                              | 47                      | 37      | NRO          |            |                   |                        | Woods (oaks) dormant           |
| Dec. 3            | 5      | 1.73         | 3        |               |                    | 0.15            |                             |                              |                              | 47                      | 37      | NRO          |            |                   |                        | Woods (oaks) dormant           |
| Dec. 5-6          | 3      | 7.94         | 2        |               |                    | 0.95            |                             |                              |                              | 53-59                   | 40-52   | 6:45AM       | 7:57PM     | 0.434             | 3/0.25                 | Woods (oaks) dormant           |
| Dec. 5-6          | 4      | 5.75         | 1        |               |                    | 3.77            |                             |                              |                              | 53-59                   | 40-52   | 7:00AM       | 7:57PM     | 1.739             | 3/0.25                 | Woods (oaks) dormant           |
| Dec. 5-6          | 5      | 1.73         | 3        |               |                    | 3.65            |                             |                              |                              | 53-59                   | 40-52   | 7:00AM       | 7:57PM     | 0.655             | 3/0.25                 | Woods (oaks) dormant           |
| Dec. 21           | 3      | 7.94         | 2        |               |                    | 0.14            |                             |                              |                              | 40                      | 30      | NRO          |            |                   |                        | Woods (oaks) dormant           |
| Dec. 21           | 4      | 5.75         | 1        |               |                    | 0.15            |                             |                              |                              | 40                      | 30      | NRO          |            |                   |                        | Woods (oaks) dormant           |
| Dec. 21           | 5      | 1.73         | 3        |               |                    | 0.15            |                             |                              |                              | 40                      | 30      | NRO          |            |                   |                        | Woods (oaks) dormant           |
| Dec. 31           | 3      | 7.94         | 2        |               |                    | 0.28            |                             |                              |                              | 43                      | 36      | NRO          |            |                   |                        | Woods (oaks) dormant           |
| Dec. 31           | 4      | 5.75         | 1        |               |                    | 0.28            |                             |                              |                              | 43                      | 36      | NRO          |            |                   |                        | Woods (oaks) dormant           |
| Dec. 31           | 5      | 1.73         | 3        |               |                    | 0.28            |                             |                              |                              | 43                      | 36      | NRO          |            |                   |                        | Woods (oaks) dormant           |

Dec. 6, 1935 3/ Dec. 7, 1935 2 Dec. 6, 1935



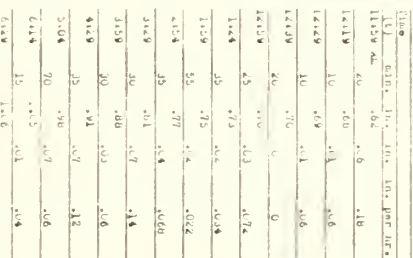
RAINFALL INTENSITY IN INCHES PER HOUR







RUNOFF IN CUBIC FEET PER SECOND



ADJUTANT GENERAL  
FIELD "C" (GAGE)

65. 4 022905

65-4-0 AT 9.32 PM JAN. 80

UNITED STATES DEPARTMENT OF AGRICULTURE

11 H BLANK IT CHILD

COLLINSVILLE, VIRGINIA, HEAT STATION  
TUBES, TCA

STORM NO. 10, 1935

|                          |                  |            |               |               |      |      |
|--------------------------|------------------|------------|---------------|---------------|------|------|
| Plot by $W_2W_3C_2$ data | 4-40             | checked by | $O_2^{12}C_2$ | .....         | date | 6-40 |
| Computations by          | $W_2W_3C_2$ data | 5-60       | checked by    | $O_2^{12}C_2$ | date | 5-40 |

Sheet 1 of 1 sheet.

1587



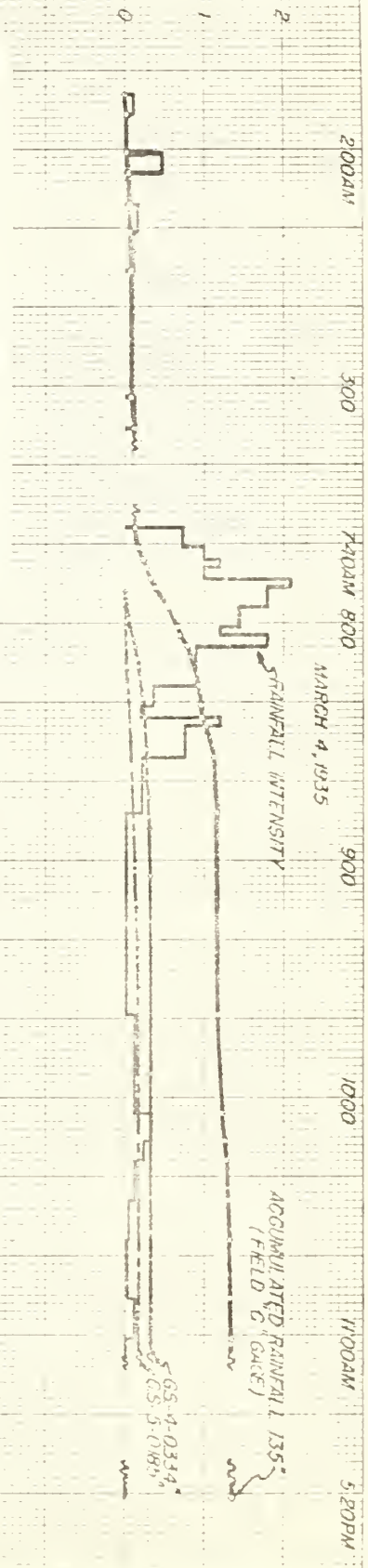
100-1000

1000

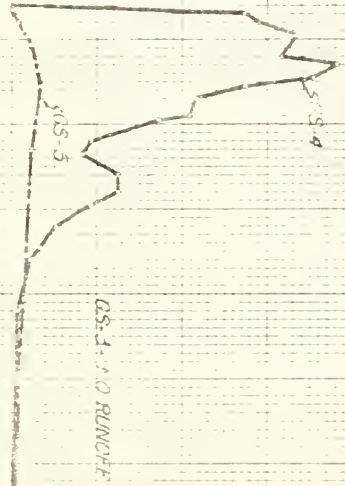


RAINFALL INTENSITY IN INCHES PER HOUR

RAINFALL INTENSITY IN INCHES PER HOUR



| SOIL CONSERVATION EQUIPMENT STATION |                                              |     |        | T-101, E-101A |      | T-101B, E-101B |        |
|-------------------------------------|----------------------------------------------|-----|--------|---------------|------|----------------|--------|
| Time<br>(t)                         | Rain of March 4, 1975<br>Rain Gauge: Field C |     |        | T-101A<br>(t) | Min. | In.            | In./hr |
|                                     | Min.                                         | In  | In./hr |               |      |                |        |
| 11:44                               | 5                                            | .01 | .01    | .16           | 10   | .93            | .09    |
| 1:21                                | 10                                           | 0   | 0      | .21           | 5    | .96            | .15    |
| 2:01                                | 5                                            | .01 | 0      | .24           | 3    | .97            | .20    |
| 3:06                                | 5                                            | .05 | .06    | .26           | 2    | 1.01           | .20    |
| 3:14                                | 8                                            | .05 | 0      | 1.4           | 8    | 1.11           | .75    |
| 3:21                                | 7                                            | .05 | .17    | 1.4           | 14   | .09            | .21    |
| 3:31                                | 17                                           | .07 | .02    | 1.8           | 51   | 1.16           | .01    |
| 3:43                                | 32                                           | .09 | 0      | 9:19          | 25   | 1.17           | .05    |
| 3:53                                | 8                                            | .09 | .15    | 10:04         | 7    | 1.22           | .34    |
| 4:13                                | 11                                           | .11 | 0      | 11            | 5    | 1.28           | .02    |
| 4:36                                | 265                                          | .11 | 0      | 16            | 10   | 1.30           | .12    |
| 4:41                                | 5                                            | .17 | .66    | .26           | 10   | 1.30           | .01    |
| 4:44                                | 3                                            | .22 | 1.9    | 1.8           | 15   | 1.11           | .06    |
| 4:46                                | 2                                            | .26 | .06    | 1.6           | 15   | 1.12           | .04    |
| 4:49                                | 3                                            | .31 | 1.6    | 1.1           | 10   | 1.34           | .02    |
| 4:51                                | 2                                            | .38 | 2.10   | 11:01         | 280  | .01            | .001   |
| 4:56                                | 5                                            | .53 | 1.80   | 5:21P         |      | 1.15           |        |
| 5                                   |                                              |     | 1.2    | 1.64          |      |                |        |



GS-4 Q AT 1121AM MARCH 4  
GS-5 Q AT 1121AM MARCH 4

[illegible]UNITED STATES DEPARTMENT OF AGRICULTURE  
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

M. H. BINNETT, CHILF,

SOIL CONSERVATION EXP. PLANT STATION  
TULSA, OKLA.

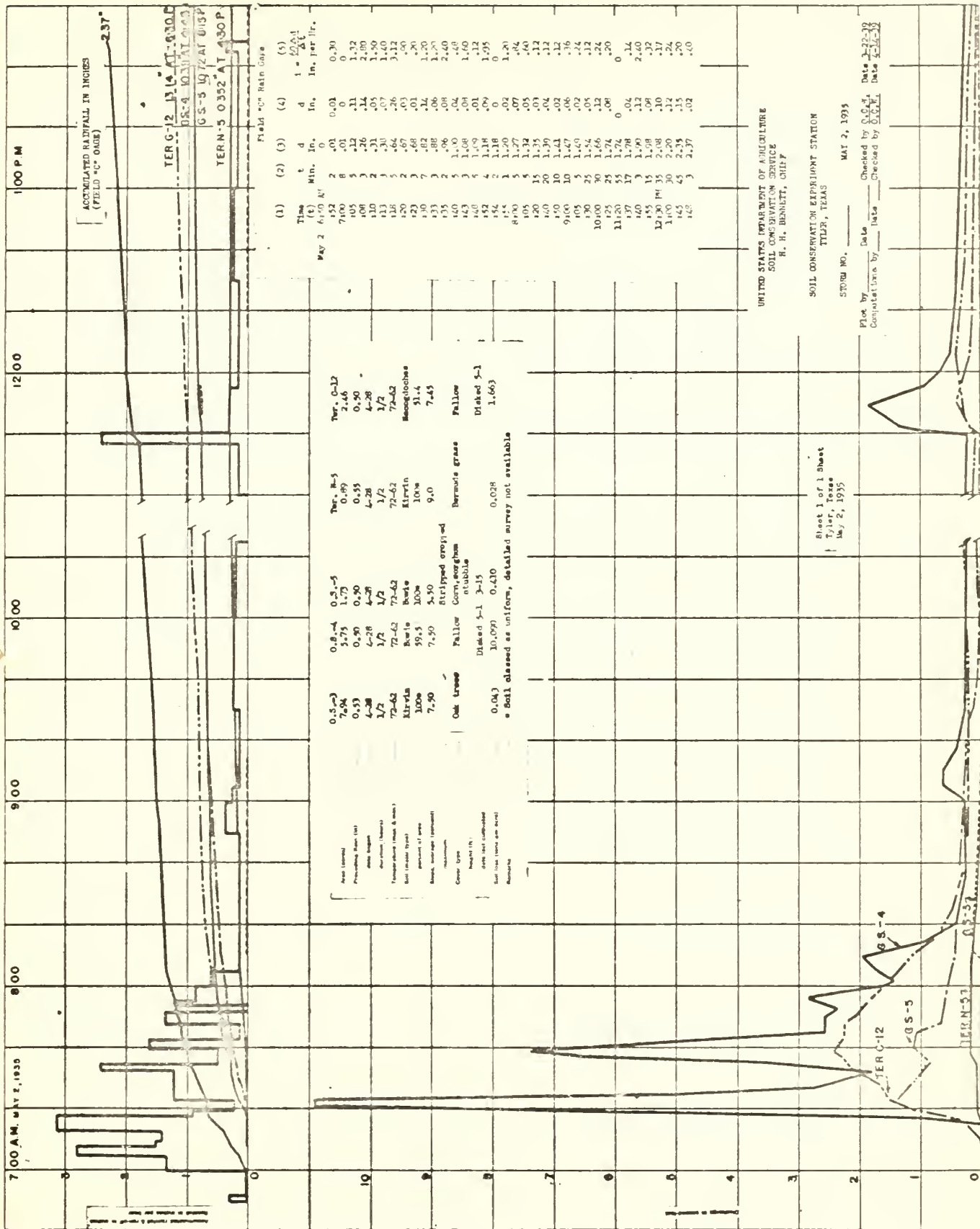
STORM NO.                 MARIN 4. 1935

Print by W.D.G. date 2-20 checked by W.D.G. date 2-20  
 Computation by W.D.G. date 2-21 checked by W.D.G. date 2-21

Page 1 of 1







| Area (Acres)        | 0.5-2.3   | 0.8-4  | 0.5-5             | 0.5-5        | 0.5-5  |
|---------------------|-----------|--------|-------------------|--------------|--------|
| Preceding Rain (In) | 7.94      | 5.75   | 1.73              | 0.49         | 0.49   |
| Area (Acres)        | 0.53      | 0.40   | 0.50              | 0.55         | 0.55   |
| Area (Acres)        | 4.28      | 4.28   | 4.28              | 4.28         | 4.28   |
| Temperature (F)     | 72-82     | 72-82  | 72-82             | 72-82        | 72-82  |
| Wind (Mph)          | 100       | 100    | 100               | 100          | 100    |
| Barometer (In)      | 30.0      | 30.0   | 30.0              | 30.0         | 30.0   |
| Clouds (%)          | 100       | 100    | 100               | 100          | 100    |
| Notes               | Old trees | Fallow | Stripped cropland | Burned grass | Fallow |
| Remarks             | 0.043     | 10.099 | 0.410             | 0.028        | 1.663  |
|                     | 0.043     | 10.099 | 0.410             | 0.028        | 1.663  |

Soil classed as uniform, detailed survey not available

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT, CHIEF

SOIL CONSERVATION EXPERIMENT STATION  
TULER, TEXAS

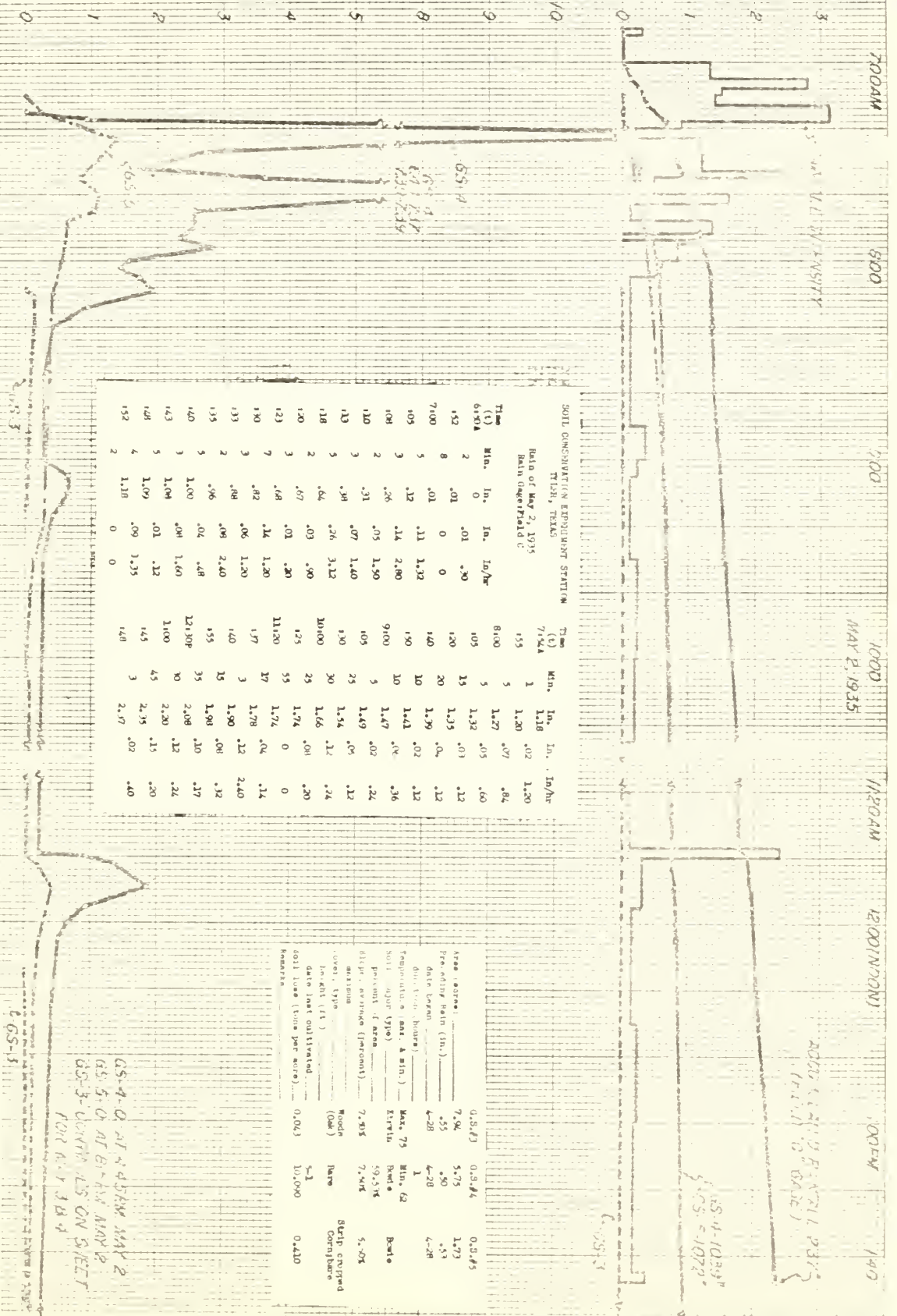
STORM NO. MAY 2, 1935

Plot by \_\_\_\_\_ Date \_\_\_\_\_  
Checked by \_\_\_\_\_ Date 2-22-38  
Corrections by \_\_\_\_\_ Date 5-25-38

Sheet 1 of 1 Sheet  
Tuler, Texas  
May 2, 1935



RUNOFF IN CUBIC FEET PER SECOND



UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
M. M. HENNETT, CHIEF,  
SOIL CONSERVATION EYESIGHT STATION  
CHANDLER, ARIZONA

STORM NO.                      May 2, 1935

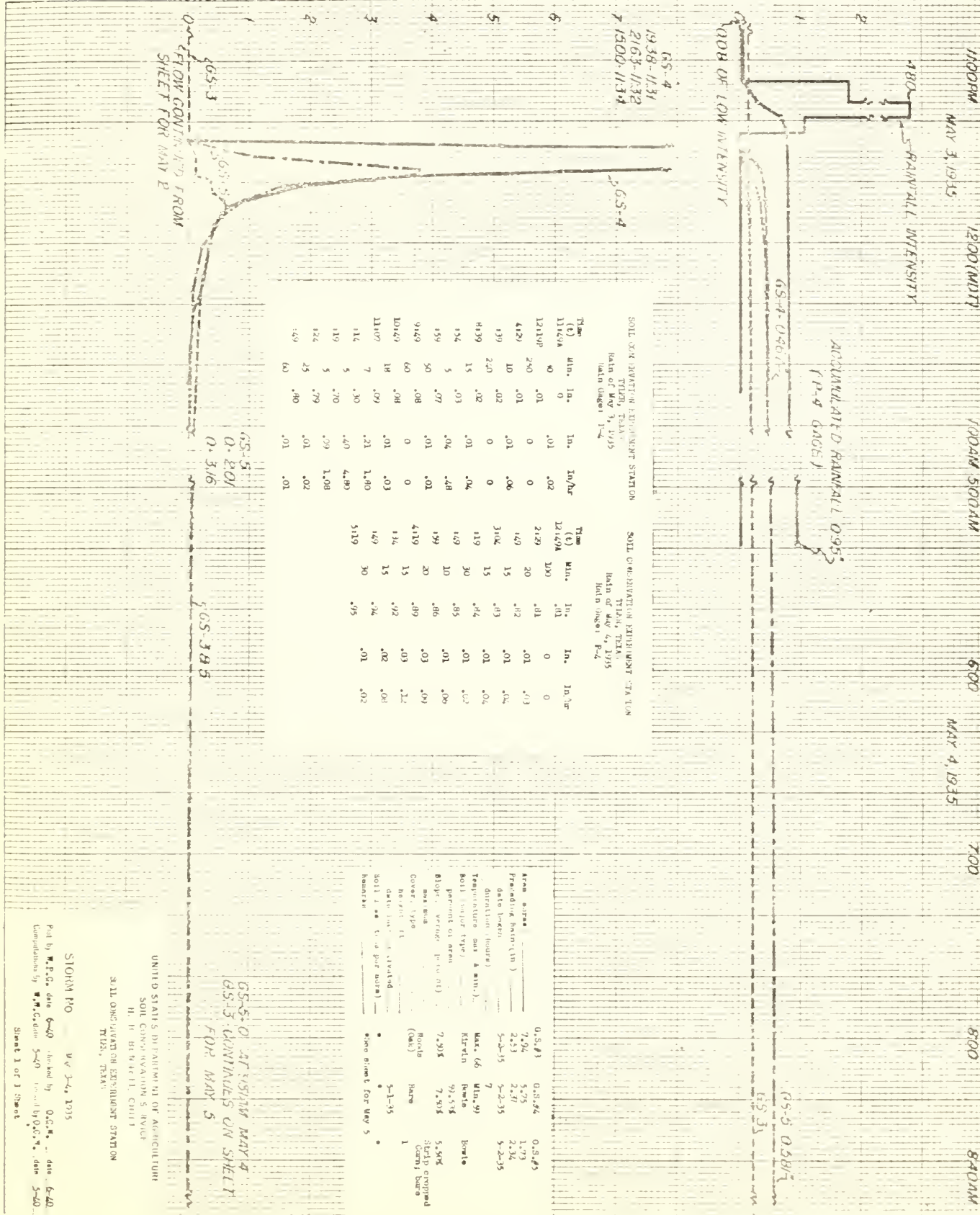
| Plot by $M_F, C_a$ data          | Exptl. method by $C_a, C_b$ data | Exptl. method by $C_a, C_b$ data |
|----------------------------------|----------------------------------|----------------------------------|
| Exptl. method by $M_F, C_a$ data | Exptl. method by $C_a, C_b$ data | Exptl. method by $C_a, C_b$ data |





ACCUMULATED RAINFALL & RUNOFF IN INCHES  
 RAINFALL INTENSITY IN INCHES PER HOUR

RUNOFF IN CUBIC FEET PER SECOND



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 TULSA, TEXAS

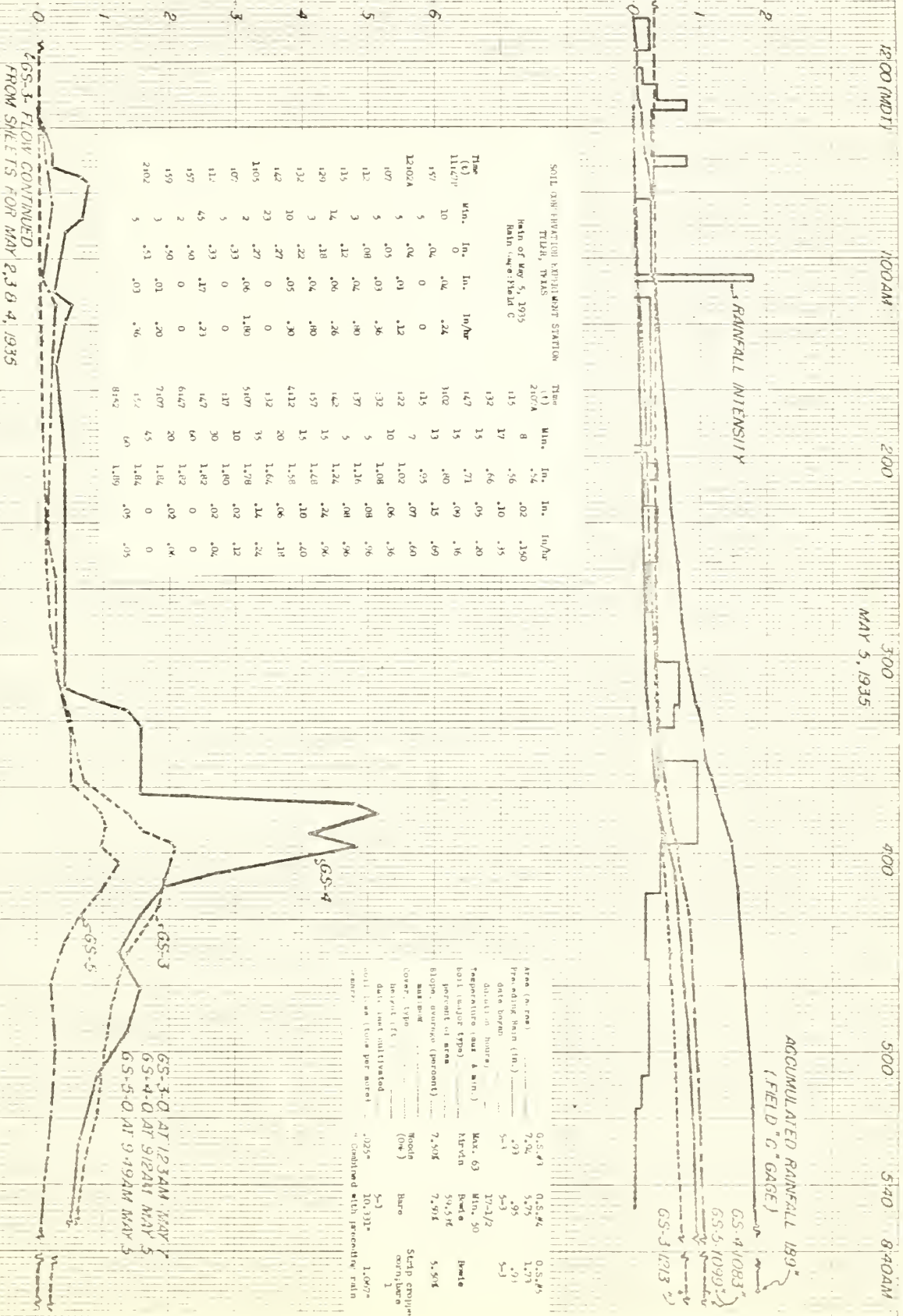
65-5-01 AT TULSA MAY 4  
 65-5-01 CONTINUES ON SHEET  
 FOR MAY 5



ACCUMULATED RAINFALL & RUNOFF IN INCHES  
RAINFALL INTENSITY IN INCHES PER HOUR

RUNOFF IN CUBIC FEET PER SECOND

65-3 FLOW CONTINUED  
FROM SHEETS FOR MAY 2, 3 & 4, 1935



ACCUMULATED RAINFALL 18.9"  
(FIELD "C" GAGE)

65-4 10.83"  
65-5 10.99"  
65-3 12.13"

|                               |         |         |        |
|-------------------------------|---------|---------|--------|
| Area (a. res.)                | 65-4 1  | 65-4 4  | 65-4 5 |
| Precipitating rain (in.)      | 7.04    | 5.75    | 1.75   |
| date (month)                  | 5-4     | 5-5     | 5-3    |
| duration (hours)              | 17-1/2  | 17-1/2  | 17-1/2 |
| Temperature (max & min.)      | Max. 63 | Min. 50 | 16.0   |
| Wet (major type)              | Wet     | Wet     | Wet    |
| percent of area               | 50.54   | 50.54   | 50.54  |
| Biological coverage (percent) | 7.50%   | 7.50%   | 7.50%  |
| cover type                    | Wet     | Wet     | Wet    |
| temp. (F)                     | 63      | 50      | 16.0   |
| date (month)                  | 5-4     | 5-5     | 5-3    |
| date (time per acre)          | 10:30   | 10:30   | 10:30  |
| cont. (cont. per acre)        | 10:30   | 10:30   | 10:30  |
| cont. (cont. per acre)        | 10:30   | 10:30   | 10:30  |

UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

H. H. HILL, CHIEF

SOIL CONSERVATION EXPERIMENT STATION

EDM. PLANS

STORM NO.

MAY 5, 1935

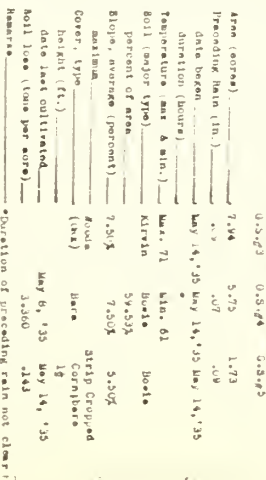
Plot by S.P. (date) checked by S.P. (date) approved by S.P. (date)

Sheet 1 of 1 Sheet





RUNOFF IN CUBIC FEET PER SECOND



COLL GROWTH VARIATION BY ELEMENTAL STATION

LIBRARY NO. 12, 1975





RAINFALL INTENSITY IN INCHES PER HOUR

5.00 PM  
PAINFUL INTENSITY 2

600  
JULY 3, 1935

700 PM

ACCUMULATED RAINFALL 1877.  
(FIELD "C" GAGE).

卷之九

2125.7 + 5.14  
2130.8 + 5.15

$$2174 + 535$$

65-3-0013

$$4.5 + 0.52 =$$

SOIL CONSERVATION EAR: ULTRASTATION  
FILE 9, 1940S

main of July 5, 1935  
main Gages Field C

[illegible]

|                           |         |         |         |
|---------------------------|---------|---------|---------|
| Area (acres)              | 7.84    | 5.75    | 1.73    |
| Preceding (ha in.)        | .60     | .64     | .63     |
| date begun                | July 22 | July 25 | July 21 |
| duration (hours)          | 1 1/2   | 1 1/2   | 1 1/2   |
| Temperature (max & min.)  | Max. 90 | Max. 91 | Max. 90 |
| Boil (major type)         | Minim   | Boile   | Boile   |
| percent of area           | 50-55%  | 50-55%  | 50-55%  |
| Algae, water (percent)    | 7-10%   | 7-10%   | 7-10%   |
| Algae, bottom             | 4-6%    | 4-6%    | 4-6%    |
| Over-type                 | (see)   | (see)   | (see)   |
| Boil (ft.)                | (see)   | (see)   | (see)   |
| date last cultivated      |         |         |         |
| Boil loss (time per acre) | .10     | .10     | .10     |
| Remarks                   |         |         |         |

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
M. H. BENNETT, CHIEF  
SOIL CONSERVATION TREATMENT STATION  
TULSA, TEXAS

STORM NO. \_\_\_\_\_ July 1, 1975

Plot by W.A.C., date 6-50, checked by S.O.B., date 6-50  
Completion by W.A.C., date 5-50, checked by O.C.W., date 5-50

Sheet 1 of 1 Sheet



RANFA L PFEIST      0      1      4      5

Runoff in cubic feet per second



| Area (acres)             | 5-73               |
|--------------------------|--------------------|
| Grassland (m)            | 1-47               |
| date (year)              | 1984-85            |
| duration (hours)         | 16                 |
| Temperature (max & min)  | max: 72<br>min: 61 |
| Soil & major types       | Booke<br>Alvin     |
| percent of open          | 50-55%             |
| Biota, average (percent) | 7-20%              |
| analysis                 | 7-20%              |
| Over type                | Mode               |
| Depth (ft)               | 1-6                |
| date next cultivation    | 1984-85            |
| date (time per acre)     | 5-11               |
| acre                     | 100-125            |

|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      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|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-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| 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 | 2056 | 2057 | 2058 | 2059 | 2060 | 2061 | 2062 | 2063 | 2064 | 2065 | 2066 | 2067 | 2068 | 2069 | 2070 | 2071 | 2072 | 2073 | 2074 | 2075 | 2076 | 2077 | 2078 | 2079 | 2080 | 2081 | 2082 | 2083 | 2084 | 2085 | 2086 | 2087 | 2088 | 2089 | 2090 | 2091 | 2092 | 2093 | 2094 | 2095 | 2096 | 2097 | 2098 | 2099 | 2100 | 2101 | 2102 | 2103 | 2104 | 2105 | 2106 | 2107 | 2108 | 2109 | 2110 | 2111 | 2112 | 2113 | 2114 | 2115 | 2116 | 2117 | 2118 | 2119 | 2120 | 2121 | 2122 | 2123 | 2124 | 2125 | 2126 | 2127 | 2128 | 2129 | 2130 | 2131 | 2132 | 2133 | 2134 | 2135 | 2136 | 2137 | 2138 | 2139 | 2140 | 2141 | 2142 | 2143 | 2144 | 2145 | 2146 | 2147 | 2148 | 2149 | 2150 | 2151 | 2152 | 2153 | 2154 | 2155 | 2156 | 2157 | 2158 | 2159 | 2160 | 2161 | 2162 | 2163 | 2164 | 2165 | 2166 | 2167 | 2168 | 2169 | 2170 | 2171 | 2172 | 2173 | 2174 | 2175 | 2176 | 2177 | 2178 | 2179 | 2180 | 2181 | 2182 | 2183 | 2184 | 2185 | 2186 | 2187 | 2188 | 2189 | 2190 | 2191 | 2192 | 2193 | 2194 | 2195 | 2196 | 2197 | 2198 | 2199 | 2200 | 2201 | 2202 | 2203 | 2204 | 2205 | 2206 | 2207 | 2208 | 2209 | 2210 | 2211 | 2212 | 2213 | 2214 | 2215 | 2216 | 2217 | 2218 | 2219 | 2220 | 2221 | 2222 | 2223 | 2224 | 2225 | 2226 | 2227 | 2228 | 2229 | 2230 | 2231 | 2232 | 2233 | 2234 | 2235 | 2236 | 2237 | 2238 | 2239 | 2240 | 2241 | 2242 | 2243 | 2244 | 2245 | 2246 | 2247 | 2248 | 2249 | 2250 | 2251 | 2252 | 2253 | 2254 | 2255 | 2256 | 2257 | 2258 | 2259 | 2260 | 2261 | 2262 | 2263 | 2264 | 2265 | 2266 | 2267 | 2268 | 2269 | 2270 | 2271 | 2272 | 2273 | 2274 | 2275 | 2276 | 2277 | 2278 | 2279 | 2280 | 2281 | 2282 | 2283 | 2284 | 2285 | 2286 | 2287 | 2288 | 2289 | 2290 | 2291 | 2292 | 2293 | 2294 | 2295 | 2296 | 2297 | 2298 | 2299 | 2300 | 2301 | 2302 | 2303 | 2304 | 2305 | 2306 | 2307 | 2308 | 2309 | 2310 | 2311 | 2312 | 2313 | 2314 | 2315 | 2316 | 2317 | 2318 | 2319 | 2320 | 2321 | 2322 | 2323 | 2324 | 2325 | 2326 | 2327 | 2328 | 2329 | 2330 | 2331 | 2332 | 2333 | 2334 | 2335 | 2336 | 2337 | 2338 | 2339 | 2340 | 2341 | 2342 | 2343 | 2344 | 2345 | 2346 | 2347 | 2348 | 2349 | 2350 | 2351 | 2352 | 2353 | 2354 | 2355 | 2356 | 2357 | 2358 | 2359 | 2360 | 2361 | 2362 | 2363 | 2364 | 2365 | 2366 | 2367 | 2368 | 2369 | 2370 | 2371 | 2372 | 2373 | 2374 | 2375 | 2376 | 2377 | 2378 | 2379 | 2380 | 2381 | 2382 | 2383 | 2384 | 2385 | 2386 | 2387 | 2388 | 2389 | 2390 | 2391 | 2392 | 2393 | 2394 | 2395 | 2396 | 2397 | 2398 | 2399 | 2400 | 2401 | 2402 | 2403 | 2404 | 2405 | 2406 | 2407 | 2408 | 2409 | 2410 | 2411 | 2412 | 2413 | 2414 | 2415 | 2416 | 2417 | 2418 | 2419 | 2420 | 2421 | 2422 | 2423 | 2424 | 2425 | 2426 | 2427 | 2428 | 2429 | 2430 | 2431 | 2432 | 2433 | 2434 | 2435 | 2436 | 2437 | 2438 | 2439 | 2440 | 2441 | 2442 | 2443 | 2444 | 2445 | 2446 | 2447 | 2448 | 2449 | 2450 | 2451 | 2452 | 2453 | 2454 | 2455 | 2456 | 2457 | 2458 | 2459 | 2460 | 2461 | 2462 | 2463 | 2464 | 2465 | 2466 | 2467 | 2468 | 2469 | 2470 | 2471 | 2472 | 2473 | 2474 | 2475 | 2476 | 2477 | 2478 | 2479 | 2480 | 2481 | 2482 | 2483 | 2484 | 2485 | 2486 | 2487 | 2488 | 2489 | 2490 | 2491 | 2492 | 2493 | 2494 | 2495 | 2496 | 2497 | 2498 | 2499 | 2500 | 2501 | 2502 | 2503 | 2504 | 2505 | 2506 | 2507 | 2508 | 2509 | 2510 | 2511 | 2512 | 2513 | 2514 | 2515 | 2516 | 2517 | 2518 | 2519 | 2520 | 2521 | 2522 | 2523 | 2524 | 2525 | 2526 | 2527 | 2528 | 2529 | 2530 | 2531 | 2532 | 2533 | 2534 | 2535 | 2536 | 2537 | 2538 | 2539 | 2540 | 2541 | 2542 | 2543 | 2544 | 2545 | 2546 | 2547 | 2548 | 2549 | 2550 | 2551 | 2552 | 2553 | 2554 | 2555 | 2556 | 2557 | 2558 | 2559 | 2560 | 2561 | 2562 | 2563 | 2564 | 2565 | 2566 | 2567 | 2568 | 2569 | 2570 | 2571 | 2572 | 2573 | 2574 | 2575 | 2576 | 2577 | 2578 | 2579 | 2580 | 2581 | 2582 | 2583 | 2584 | 2585 | 2586 | 2587 | 2588 | 2589 | 2590 | 2591 | 2592 | 2593 | 2594 | 2595 | 2596 | 2597 | 2598 | 2599 | 2600 | 2601 | 2602 | 2603 | 2604 | 2605 | 2606 | 2607 | 2608 | 2609 | 2610 | 2611 | 2612 | 2613 | 2614 | 2615 | 2616 | 2617 | 2618 | 2619 | 2620 | 2621 | 2622 | 2623 | 2624 | 2625 | 2626 | 2627 | 2628 | 2629 | 2630 | 2631 | 2632 | 2633 | 2634 | 2635 | 2636 | 2637 | 2638 | 2639 | 2640 | 2641 | 2642 | 2643 | 2644 | 2645 | 2646 | 2647 | 2648 | 2649 | 2650 | 2651 | 2652 | 2653 | 2654 | 2655 | 2656 | 2657 | 2658 | 2659 | 2660 | 2661 | 2662 | 2663 | 2664 | 2665 | 2666 | 2667 | 2668 | 2669 | 2670 | 2671 | 2672 | 2673 | 2674 | 2675 | 2676 | 2677 | 2678 | 2679 | 2680 | 2681 | 2682 | 2683 | 2684 | 2685 | 2686 | 2687 | 2688 | 2689 | 2690 | 2691 | 2692 | 2693 | 2694 | 2695 | 2696 | 2697 | 2698 | 2699 | 2700 | 2701 | 2702 | 2703 | 2704 | 2705 | 2706 | 2707 | 2708 | 2709 | 2710 | 2711 | 2712 | 2713 | 2714 | 2715 | 2716 | 2717 | 2718 | 2719 | 2720 | 2721 | 2722 | 2723 | 2724 | 2725 | 2726 | 2727 | 2728 | 2729 | 2730 | 2731 | 2732 | 2733 | 2734 | 2735 | 2736 | 2737 | 2738 | 2739 | 2740 | 2741 | 2742 | 2743 | 2744 | 2745 | 2746 | 2747 | 2748 | 2749 | 2750 | 2751 | 2752 | 2753 | 2754 | 2755 | 2756 | 2757 | 2758 | 2759 | 2760 | 2761 | 2762 | 2763 | 2764 | 2765 | 2766 | 2767 | 2768 | 2769 | 2770 | 2771 | 2772 | 2773 | 2774 | 2775 | 2776 | 2777 | 2778 | 2779 | 2780 | 2781 | 2782 | 2783 | 2784 | 2785 | 2786 | 2787 | 2788 | 2789 | 2790 | 2791 | 2792 | 2793 | 2794 | 2795 | 2796 | 2797 | 2798 | 2799 | 2800 | 2801 | 2802 | 2803 | 2804 | 2805 | 2806 | 2807 | 2808 | 2809 | 2810 | 2811 | 2812 | 2813 | 2814 | 2815 | 2816 | 2817 | 2818 | 2819 | 2820 | 2821 | 2822 | 2823 | 2824 | 2825 | 2826 | 2827 | 2828 | 2829 | 2830 | 2831 | 2832 | 2833 | 2834 | 2835 | 2836 | 2837 | 2838 | 2839 | 2840 | 2841 | 2842 | 2843 | 2844 | 2845 | 2846 | 2847 | 2848 | 2849 | 2850 | 2851 | 2852 | 2853 | 2854 | 2855 | 2856 | 2857 | 2858 | 2859 | 2860 | 2861 | 2862 | 2863 | 2864 | 2865 | 2866 | 2867 | 2868 | 2869 | 2870 | 2871 | 2872 | 2873 | 2874 | 2875 | 2876 | 2877 | 2878 | 2879 | 2880 | 2881 | 2882 | 2883 | 2884 | 2885 | 2886 | 2887 | 2888 | 2889 | 2890 | 2891 | 2892 | 2893 | 2894 | 2895 | 2896 | 2897 | 2898 | 2899 | 2900 | 2901 | 2902 | 2903 | 2904 | 2905 | 2906 | 2907 | 2908 | 2909 | 2910 | 2911 | 2912 | 2913 | 2914 | 2915 | 2916 | 2917 | 2918 | 2919 | 2920 | 2921 | 2922 | 2923 | 2924 | 2925 | 2926 | 2927 | 2928 | 2929 | 2930 | 2931 | 2932 | 2933 | 2934 | 2935 | 2936 | 2937 | 2938 | 2939 | 2940 | 2941 | 2942 | 2943 | 2944 | 2945 | 2946 | 2947 | 2948 | 2949 | 2950 | 2951 | 2952 | 2953 | 2954 | 2955 | 2956 | 2957 | 2958 | 2959 | 2960 | 2961 | 2962 | 2963 | 2964 | 2965 | 2966 | 2967 | 2968 | 2969 | 2970 | 2971 | 2972 | 2973 | 2974 | 2975 | 2976 | 2977 | 2978 | 2979 | 2980 | 2981 | 2982 | 2983 | 2984 | 2985 | 2986 | 2987 | 2988 | 2989 | 2990 | 2991 | 2992 | 2993 | 2994 | 2995 | 2996 | 2997 | 2998 | 2999 | 3000 | 3001 | 3002 | 3003 | 3004 | 3005 | 3006 | 3007 | 3008 | 3009 | 3010 | 3011 | 3012 | 3013 | 3014 | 3015 | 3016 | 3017 | 3018 | 3019 | 3020 | 3021 | 3022 | 3023 | 3024 | 3025 | 3026 | 3027 | 3028 | 3029 | 3030 | 3031 | 3032 | 3033 | 3034 | 3035 | 3036 | 3037 | 3038 | 3039 | 3040 | 3041 | 3042 | 3043 | 3044 | 3045 | 3046 | 3047 | 3048 | 3049 | 3050 | 3051 | 3052 | 3053 | 3054 | 3055 | 3056 | 3057 | 3058 | 3059 | 3060 | 3061 | 3062 | 3063 | 3064 | 3065 | 3066 | 3067 | 3068 | 3069 | 3070 | 3071 | 3072 | 3073 | 3074 | 3075 | 3076 | 3077 | 3078 | 3079 | 3080 | 3081 | 3082 | 3083 | 3084 | 3085 | 3086 | 3087 | 3088 | 3089 | 3090 | 3091 | 3092 | 3093 | 3094 | 3095 | 3096 | 3097 | 3098 | 3099 | 3100 | 3101 | 3102 | 3103 | 3104 | 3105 | 3106 | 3107 | 3108 | 3109 | 3110 | 3111 | 3112 | 3113 | 3114 | 3115 | 3116 | 3117 | 3118 | 3119 | 3120 | 3121 | 3122 | 3123 | 3124 | 3125 | 3126 | 3127 | 3128 | 3129 | 3130 | 3131 | 3132 | 3133 | 3134 | 3135 | 3136 | 3137 | 3138 | 3139 | 3140 | 3141 | 3142 | 3143 | 3144 | 3145 | 3146 | 3147 | 3148 | 3149 | 3150 | 3151 | 3152 | 3153 | 3154 | 3155 | 3156 | 3157 | 3158 | 3159 | 3160 | 3161 | 3162 | 3163 | 3164 | 3165 | 3166 | 3167 | 3168 | 3169 | 3170 | 3171 | 3172 | 3173 | 3174 | 3175 | 3176 | 3177 | 3178 | 3179 | 3180 | 3181 | 3182 | 3183 | 3184 | 3185 | 3186 | 3187 | 3188 | 3189 | 3190 | 3191 | 3192 | 3193 | 3194 | 3195 | 3196 | 3197 | 3198 | 3199 | 3200 | 3201 | 3202 | 3203 | 3204 | 3205 | 3206 | 3207 | 3208 | 3209 | 3210 | 3211 | 3212 | 3213 | 3214 | 3215 | 3216 | 3217 | 3218 | 3219 | 3220 | 3221 | 3222 | 3223 | 3224 | 3225 | 3226 | 3227 | 3228 | 3229 | 3230 | 3231 | 3232 | 3233 | 3234 | 3235 | 3236 | 3237 | 3238 | 3239 | 3240 | 3241 | 3242 | 3243 | 3244 | 3245 | 3246 | 3247 | 3248 | 3249 | 3250 | 3251 | 3252 | 3253 | 3254 | 3255 | 3256 | 3257 | 3258 | 3259 | 3260 | 3261 | 3262 | 3263 | 3264 | 3265 | 3266 | 3267 | 3268 | 3269 | 3270 | 3271 | 3272 | 3273 | 3274 | 3275 | 3276 | 3277 | 3278 | 3279 | 3280 | 3281 | 3282 | 3283 | 3284 | 3285 | 3286 | 3287 | 3288 | 3289 | 3290 | 3291 | 3292 | 3293 | 3294 | 3295 | 3296 | 3297 | 3298 | 3299 | 3300 | 3301 | 3302 | 3303 | 3304 | 3305 | 3306 | 3307 | 3308 | 3309 | 3310 | 3311 | 3312 | 3313 | 3314 | 3315 | 3316 | 3317 | 3318 | 3319 | 3320 | 3321 | 3322 | 3323 | 3324 | 3325 | 3326 | 3327 | 3328 | 3329 | 3330 | 3331 | 3332 | 3333 | 3334 | 3335 | 3336 | 3337 | 3338 | 3339 | 3340 | 3341 | 3342 | 3343 | 3344 | 334 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-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1. 1970 2. 1971 3. 1972 4. 1973 5. 1974 6. 1975 7. 1976 8. 1977 9. 1978 10. 1979 11. 1980 12. 1981 13. 1982 14. 1983 15. 1984 16. 1985 17. 1986 18. 1987 19. 1988 20. 1989 21. 1990 22. 1991 23. 1992 24. 1993 25. 1994 26. 1995 27. 1996 28. 1997 29. 1998 30. 1999 31. 2000 32. 2001 33. 2002 34. 2003 35. 2004 36. 2005 37. 2006 38. 2007 39. 2008 40. 2009 41. 2010 42. 2011 43. 2012 44. 2013 45. 2014 46. 2015 47. 2016 48. 2017 49. 2018 50. 2019 51. 2020 52. 2021 53. 2022 54. 2023 55. 2024 56. 2025 57. 2026 58. 2027 59. 2028 60. 2029 61. 2030 62. 2031 63. 2032 64. 2033 65. 2034 66. 2035 67. 2036 68. 2037 69. 2038 70. 2039 71. 2040 72. 2041 73. 2042 74. 2043 75. 2044 76. 2045 77. 2046 78. 2047 79. 2048 80. 2049 81. 2050 82. 2051 83. 2052 84. 2053 85. 2054 86. 2055 87. 2056 88. 2057 89. 2058 90. 2059 91. 2060 92. 2061 93. 2062 94. 2063 95. 2064 96. 2065 97. 2066 98. 2067 99. 2068 100. 2069 101. 2070 102. 2071 103. 2072 104. 2073 105. 2074 106. 2075 107. 2076 108. 2077 109. 2078 110. 2079 111. 2080 112. 2081 113. 2082 114. 2083 115. 2084 116. 2085 117. 2086 118. 2087 119. 2088 120. 2089 121. 2090 122. 2091 123. 2092 124. 2093 125. 2094 126. 2095 127. 2096 128. 2097 129. 2098 130. 2099 131. 2100 132. 2101 133. 2102 134. 2103 135. 2104 136. 2105 137. 2106 138. 2107 139. 2108 140. 2109 141. 2110 142. 2111 143. 2112 144. 2113 145. 2114 146. 2115 147. 2116 148. 2117 149. 2118 150. 2119 151. 2120 152. 2121 153. 2122 154. 2123 155. 2124 156. 2125 157. 2126 158. 2127 159. 2128 160. 2129 161. 2130 162. 2131 163. 2132 164. 2133 165. 2134 166. 2135 167. 2136 168. 2137 169. 2138 170. 2139 171. 2140 172. 2141 173. 2142 174. 2143 175. 2144 176. 2145 177. 2146 178. 2147 179. 2148 180. 2149 181. 2150 182. 2151 183. 2152 184. 2153 185. 2154 186. 2155 187. 2156 188. 2157 189. 2158 190. 2159 191. 2160 192. 2161 193. 2162 194. 2163 195. 2164 196. 2165 197. 2166 198. 2167 199. 2168 200. 2169 201. 2170 202. 2171 203. 2172 204. 2173 205. 2174 206. 2175 207. 2176 208. 2177 209. 2178 210. 2179 211. 2180 212. 2181 213. 2182 214. 2183 215. 2184 216. 2185 217. 2186 218. 2189 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 62

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UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT, CHIEF,  
SOIL CONSERVATION PLANTMENT STATION  
TULSA, OKLA.

STOKIN NO. \_\_\_\_\_ October 27, 1933

Post by W.A.S. date 6-60, checked by R.C.M. date 6-60  
 Computations by W.A.S. date 5-60, checked by R.C.M. date 5-60

Sheet 1 of 1 Sheet

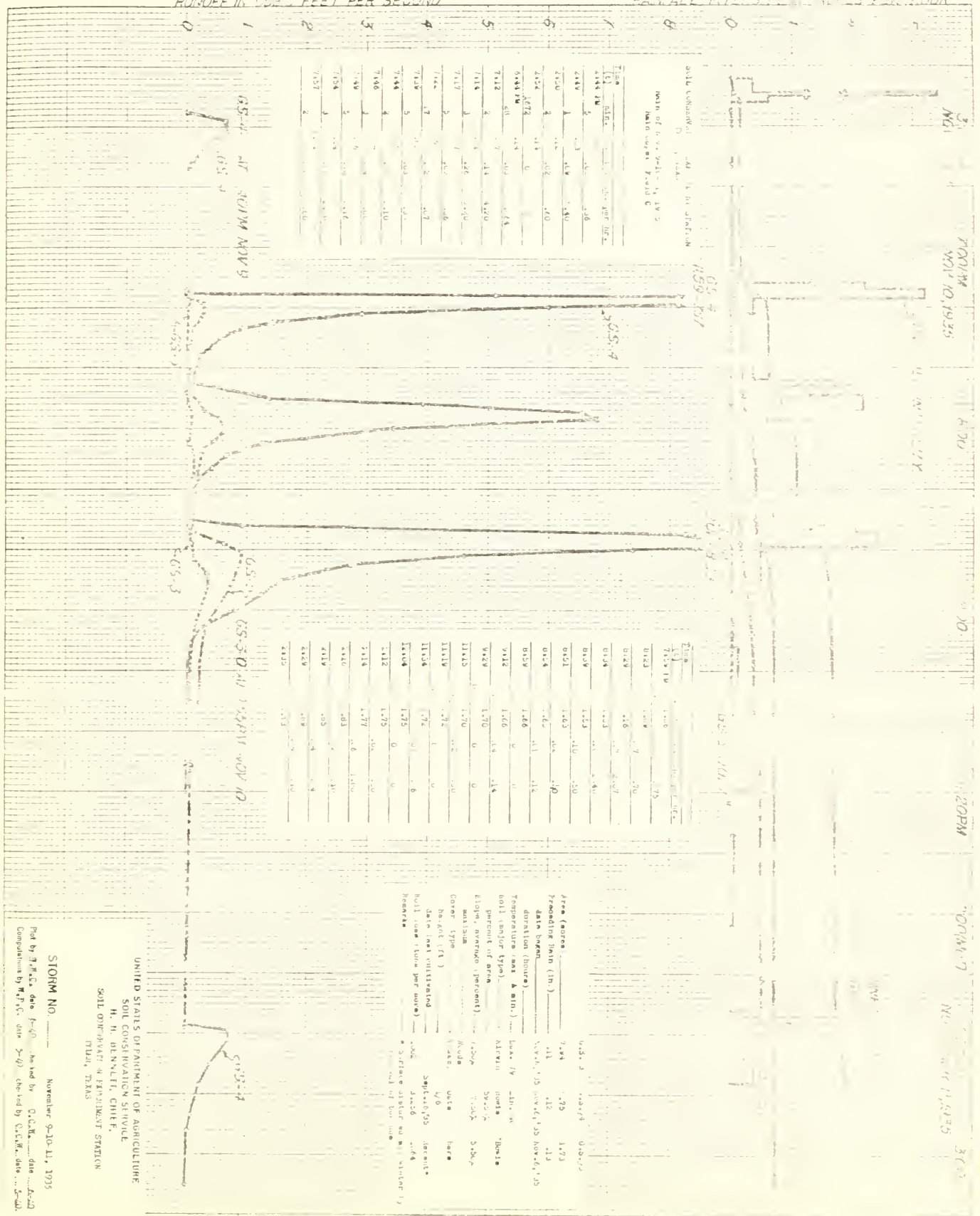
Due to a 25% disturbed all  
winter by removal of forest

18-8



ACCUMULATED RAINFALL IN INCHES  
 RAINFALL INTENSITY IN INCHES PER HOUR

RUNOFF IN CUBIC FEET PER SECOND

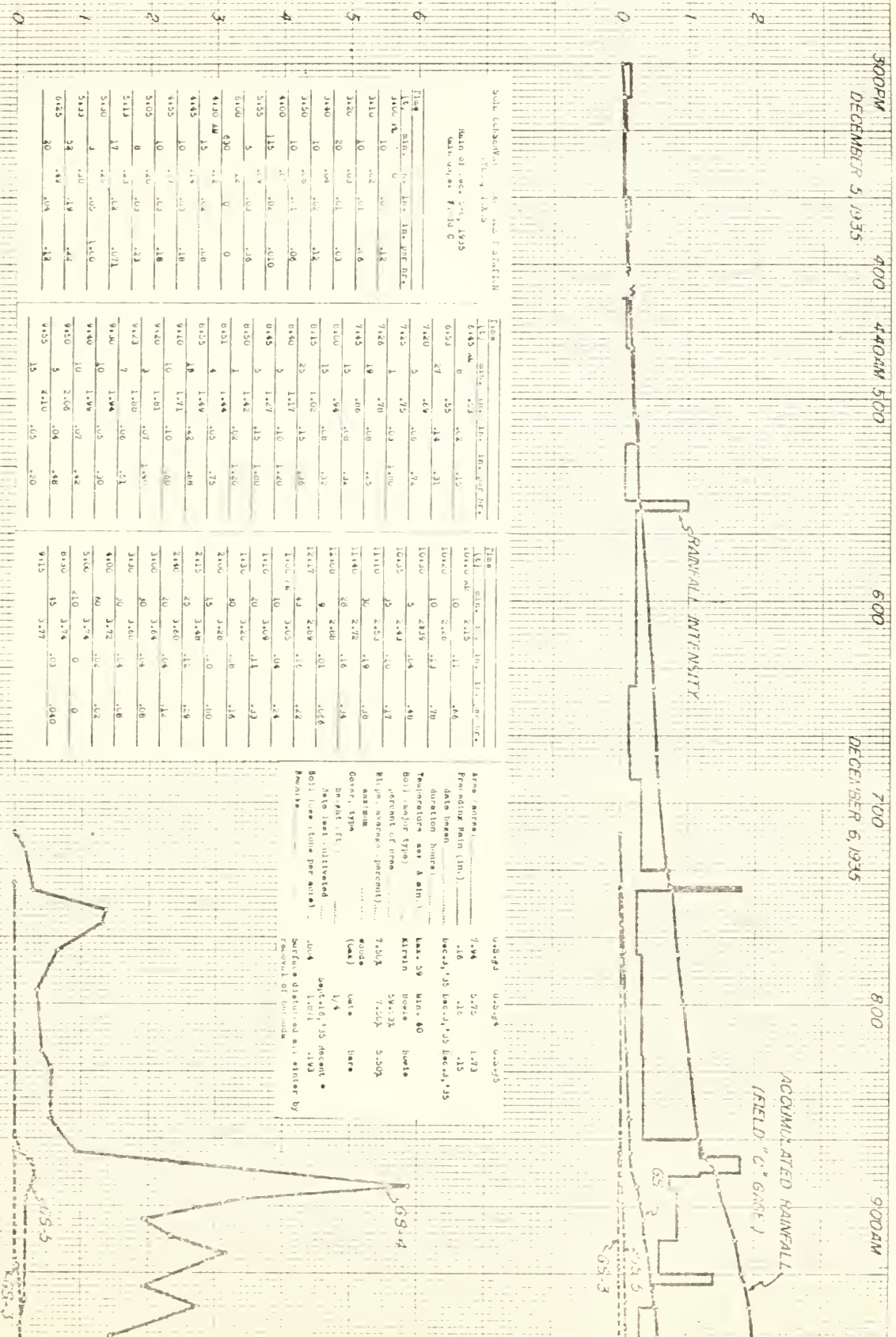


STORM NO. \_\_\_\_\_ November 9-10-11, 1935  
 Plot by R.F.C. date 1-10-36 by O.C.W. date 1-10-36  
 Computation by R.F.C. date 1-10-36 by O.C.W. date 1-10-36

UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 H. H. BENNETT, CHIEF E.  
 SOIL CONSERVATION DISTRICT STATION  
 DALLAS, TEXAS

1537

RAINFALL INTENSITY IN INCHES PER HOUR



“None 1 of 2; two of 2”

14

15







100-100000

135

1923



UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
DIVISION OF RESEARCH

MONTH Jan, Feb, Mar, Apr., 1936

SHEET 1 OF 5 SHEETS

PROJECT 803 Experiment Station, Tyler, Texas RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date    | Watershed |              | Rainfall |              |                    |                 |                             |                              | Temperature (degrees F)      |             | Flow-off        |              |      |                                | Rainfall Meters (inches) | Soil Loss (tons per acre) | Condition of Watershed                     |
|---------|-----------|--------------|----------|--------------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|-------------|-----------------|--------------|------|--------------------------------|--------------------------|---------------------------|--------------------------------------------|
|         | Number    | Area (acres) | Gage No. | Begin (hour) | Duration (minutes) | Amount (inches) | Maximum Intensity           |                              |                              | Peak (hour) | Amount (inches) | Maximum Rate |      |                                |                          |                           |                                            |
|         |           |              |          |              |                    |                 | 5 minutes (inches per hour) | 15 minutes (inches per hour) | 30 minutes (inches per hour) |             |                 | Cu ft. sec.  | Time |                                |                          |                           |                                            |
| (1)     | (2)       | (3)          | (4)      | (5)          | (6)                | (7)             | (8)                         | (9)                          | (10)                         | (11)        | (12)            | (13)         | (14) | (15)                           | (16)                     | (17)                      | (18)                                       |
| 1936    |           |              |          |              |                    |                 |                             |                              |                              |             |                 |              |      |                                |                          |                           |                                            |
| Jan. 7  | 3         | 7.936        | 2-P-Pb   | 7:00AM       | 25                 | 0.25            | 1.92                        | 0.80                         | 0.14                         | 46          | 36              |              |      |                                |                          |                           | Wooded, bare, sparse, subsoil moist.       |
| Jan. 7  | 4         | 5.717        | 1-P-C    |              |                    | 0.22            |                             |                              |                              | 46          | 36              |              |      |                                |                          |                           | Cats 3", good, soil hard.                  |
| Jan. 7  | 5         | 1.726        | 3-P-A    |              |                    | 0.21            |                             |                              |                              | 46          | 36              |              |      |                                |                          |                           | Fallow, loose, dormant roots removed.      |
| Jan. 18 | 3         | 7.936        | 2-P-Pb   |              |                    | 0.03            |                             |                              |                              | 33          | 24              |              |      |                                |                          |                           | Wooded, bare, sparse, subsoil moist.       |
| Jan. 18 | 4         | 5.717        | 1-P-C    | 6:00PM       | 310                | 0.02            |                             |                              |                              | 33          | 24              |              |      |                                |                          |                           | Good stand oats, subsoil moist.            |
| Jan. 18 | 5         | 1.726        | 3-P-A    |              |                    | 0.04            |                             |                              |                              | 33          | 24              |              |      |                                |                          |                           | Fallow, loose, dry, subsoil moist.         |
| Jan. 29 | 3         | 7.936        | 2-Pb     |              |                    | (.07 snow)      |                             |                              |                              | 31          | 27              |              |      |                                |                          |                           | Wooded, bare, sparse, subsoil moist.       |
| Jan. 29 | 4         | 5.717        | 1-C      | 12:30PM      | 250                | (.67 snow)      |                             |                              |                              | 31          | 27              |              |      |                                |                          |                           | Good stand oats, subsoil moist.            |
| Jan. 29 | 5         | 1.726        | 3-A      |              |                    | (.67 snow)      |                             |                              |                              | 31          | 27              |              |      |                                |                          |                           | Fallow, loose, dry, subsoil moist.         |
| Feb. 3  | 3         | 7.936        | 2-Pb     |              |                    | 0.29            |                             |                              |                              | 67          | 42              |              |      |                                |                          |                           | Wooded, bare, sparse, subsoil moist.       |
| Feb. 3  | 4         | 5.717        | 1-C      | 4:15AM       | 180                | 0.27            | 0.72                        | 0.20                         | 0.14                         | 67          | 42              |              |      |                                |                          |                           | Good stand oats, subsoil moist.            |
| Feb. 3  | 5         | 1.726        | 3-A      |              |                    | 0.27            |                             |                              |                              | 67          | 42              |              |      |                                |                          |                           | Fallow, loose, dry, subsoil moist.         |
| Feb. 6  | 3         | 7.936        | 2-Pb     |              |                    | 0.05            |                             |                              |                              | 41          | 28              |              |      |                                |                          |                           | Wooded, bare, sparse, subsoil moist.       |
| Feb. 6  | 4         | 5.717        | 1-C      | 12:22PM      | 30                 | 0.05            | 0.34                        | 0.12                         | 0.06                         | 41          | 28              |              |      |                                |                          |                           | Cats 7", good, soil hard, moist.           |
| Feb. 6  | 5         | 1.726        | 3-A      |              |                    | 0.05            |                             |                              |                              | 41          | 28              |              |      |                                |                          |                           | Fallow, loose, dry, subsoil moist.         |
| Feb. 13 | 3         | 7.936        | 2-Pb     |              |                    | 0.03            |                             |                              |                              | 63          | 35              |              |      |                                |                          |                           | Wooded, bare, sparse, subsoil moist.       |
| Feb. 13 | 4         | 5.717        | 1-C      | 9:08PM       | 215                | 0.02            |                             |                              |                              | 63          | 35              |              |      |                                |                          |                           | Cats 7", good, soil hard, moist.           |
| Feb. 13 | 5         | 1.726        | 3-A      |              |                    | 0.08            |                             |                              |                              | 63          | 35              |              |      |                                |                          |                           | Fallow, loose, dry, subsoil moist.         |
| Feb. 26 | 3         | 7.936        | 2-Pb     |              |                    | 0.81            | 1.20                        | 0.52                         | 0.38                         | 58          | 35              |              |      |                                |                          |                           | Wooded, bare, sparse, subsoil moist.       |
| Feb. 26 | 4         | 5.717        | 1-C      | 7:12AM       | 190                | 0.68            |                             |                              |                              | 58          | 35              |              |      |                                |                          |                           | Fallow, loose, dry, subsoil moist.         |
| Feb. 26 | 5         | 1.726        | 3-A      |              |                    | 0.75            |                             |                              |                              | 58          | 35              |              |      |                                |                          |                           | Fallow, loose, dry, subsoil moist.         |
| Mar. 2  | 3         | 7.936        | 2-Pb     |              |                    | 0.02            |                             |                              |                              | 68          | 35              |              |      |                                |                          |                           | Wooded, bare, sparse, subsoil moist.       |
| Mar. 2  | 4         | 5.717        | 1-C      | 6:21AM       | 250                | 0.02            |                             |                              |                              | 68          | 35              |              |      |                                |                          |                           | Fallow, loose, dry, subsoil moist.         |
| Mar. 2  | 5         | 1.726        | 3-A      |              |                    | 0.02            |                             |                              |                              | 68          | 35              |              |      |                                |                          |                           | Fallow, loose, dry, subsoil moist.         |
| Mar. 4  | 3         | 7.936        | 2-Pb     |              |                    | 0.75            | 0.48                        | 0.40                         | 0.46                         | 69          | 36              |              |      |                                |                          |                           | Wooded, bare, sparse, subsoil moist.       |
| Mar. 4  | 4         | 5.717        | 1-C      | 3:20AM       | 270                | 0.69            |                             |                              |                              | 69          | 36              |              |      |                                |                          |                           | Fallow, loose, dry, subsoil moist.         |
| Mar. 4  | 5         | 1.726        | 3-A      |              |                    | 0.67            |                             |                              |                              | 69          | 36              |              |      |                                |                          |                           | Fallow, loose, dry, subsoil moist.         |
| Mar. 24 | 3         | 7.936        | 2-Pb     |              |                    | 0.65            |                             |                              |                              | 73          | 51              |              |      | 0.001                          |                          | 0                         | Wooded, bare, sparse, soil moist.          |
| Mar. 24 | 4         | 5.717        | 1-C      | 1:28AM       | 25                 | 0.69            | 6.00                        | 2.56                         | 1.40                         | 73          | 51              |              |      | Record lost (how installation) |                          |                           | Corn 1-2", good, subsoil moist.            |
| Mar. 24 | 5         | 1.726        | 3-A      |              |                    | 0.70            |                             |                              |                              | 73          | 51              |              |      | 0.011                          |                          | 0.0056                    | Fallow, loose, dry, subsoil moist.         |
| Apr. 8  | 3         | 7.936        | 2-Pb     |              |                    | 0.07            |                             |                              |                              | 49          | 36              |              |      |                                |                          |                           | Wooded in leaf, soil moist, subsoil moist. |
| Apr. 8  | 4         | 5.717        | 1-C      | 10:00AM      | 200                | 0.07            |                             |                              |                              | 49          | 36              |              |      |                                |                          |                           | Soil newly cultivated, loose, dry.         |
| Apr. 8  | 5         | 1.726        | 3-A      |              |                    | 0.08            |                             |                              |                              | 49          | 36              |              |      |                                |                          |                           | Fallow, loose, dry, subsoil moist.         |
| Apr. 21 | 3         | 7.936        | 2-Pb     |              |                    | 0.17            | 1.48                        | 0.92                         | 0.60                         | 65          | 42              |              |      |                                |                          |                           | Wooded, bare, sparse, subsoil moist.       |
| Apr. 21 | 4         | 5.717        | 1-C      | 1:37PM       | 100                | 0.13            |                             |                              |                              | 65          | 42              |              |      |                                |                          |                           | Corn 1-2", good, subsoil moist.            |
| Apr. 21 | 5         | 1.726        | 3-A      |              |                    | 0.46            |                             |                              |                              | 65          | 42              |              |      |                                |                          |                           | Fallow, loose, dry, subsoil moist.         |





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH Apr. May, June & July, 1936  
 SHEET 2 OF 3

 PROJECT 808 Experiment Station, Tyler, Texas RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date     | WATERSHED |              | RAINFALL  |              |                    |                 |                            | TEMPERATURE (degrees F)      |                              |         |         | RUN-OFF      |              |                 |              | RAINFALL MINUS RUN-OFF (inches) | Size Loss (tons per acre) | CONDITION OF WATERSHED                 |      |
|----------|-----------|--------------|-----------|--------------|--------------------|-----------------|----------------------------|------------------------------|------------------------------|---------|---------|--------------|--------------|-----------------|--------------|---------------------------------|---------------------------|----------------------------------------|------|
|          | Number    | Area (acres) | Stage No. | Point (hour) | Duration (minutes) | Amount (inches) | MAXIMUM INTENSITY          |                              |                              | Maximum | Minimum | Began (hour) | Ended (hour) | Amount (inches) | MAXIMUM RATE |                                 |                           |                                        |      |
|          |           |              |           |              |                    |                 | 1 minute (inches per hour) | 15 minutes (inches per hour) | 30 minutes (inches per hour) |         |         |              |              |                 | Ch. R. sec.  |                                 |                           |                                        | Time |
| 1936     | (1)       | (2)          | (3)       | (4)          | (5)                | (6)             | (7)                        | (8)                          | (9)                          | (10)    | (11)    | (12)         | (13)         | (14)            | (15)         | (16)                            | (17)                      | (18)                                   |      |
| Apr. 28  | 3         | 7.936        | 2-7b      |              |                    |                 | 3.02                       |                              |                              | 65      | 62      | NRO          |              |                 |              |                                 |                           | Very little leaf litter, soil moist    |      |
| Apr. 28  | 4         | 5.747        | 1-c       | 5:23AM       | 605                |                 | 2.93                       |                              | 2.00                         | 65      | 62      | NRO          |              |                 |              |                                 |                           | Corn 18", good, soil 18" subsoil moist |      |
| Apr. 28  | 5         | 1.726        | 3-A       |              |                    |                 | 3.10                       |                              |                              | 65      | 62      | 6:53AM       | 8:05AM       | 0.151           | No Record    | 7:31AM                          | 2.779                     | Fallow, loose, dry, subsoil moist.     |      |
| May 3    | 3         | 7.936        | 2         |              |                    |                 | 0.36                       |                              |                              | 76      | 63      | NRO          |              |                 |              |                                 |                           | Very little leaf litter, soil moist    |      |
| May 3    | 4         | 5.747        | 1         | 4:30AM       | 115                |                 | 0.34                       |                              | 0.20                         | 76      | 63      | NRO          |              |                 |              |                                 |                           | Moist, subsoil moist.                  |      |
| May 3    | 5         | 1.726        | 3         |              |                    |                 | 0.36                       |                              |                              | 76      | 63      | NRO          |              |                 |              |                                 |                           | Fallow, crusted, moist, subsoil moist  |      |
| May 8-9  | 3         | 7.936        | 2         |              |                    |                 | 4.00                       |                              |                              | 78      | 68      | 12:17A       | 8:13AM       | 1.094           | 8.10         | 12:49                           |                           | Little underbrush, subsoil moist       |      |
| May 10   | 3         | 7.936        | 2         |              |                    |                 | 1.22                       |                              |                              | 76      | 60      | 10:11P       | 11:11A       | 0.168           | 0.51         | 11:09                           | 3.137                     | DO.                                    |      |
|          |           |              |           |              |                    |                 | 5.22                       |                              |                              |         |         |              |              | 2.002           |              |                                 |                           |                                        |      |
| May 8-9  | 4         | 5.747        | 1         | 6:11PM       | 590                |                 | 3.82                       |                              | 4.44                         | 79      | 63      | No record    |              |                 |              |                                 |                           | Corn 30", good, soil wet, heavily cul- |      |
| May 9    | 4         | 5.747        | 1         | 4:26PM       | 30                 |                 | .02                        |                              |                              | 79      | 68      | No record    |              |                 |              |                                 |                           | DO.                                    |      |
| May 9    | 4         | 5.747        | 1         | 12:20PM      | 123                |                 | 0.15                       |                              | 1.28                         | 76      | 60      | No record    |              |                 |              |                                 |                           | DO.                                    |      |
| May 9-10 | 4         | 5.747        | 1         | 5:48PM       | 545                |                 | 1.10                       |                              | 0.84                         | 76      | 60      | No record    |              |                 |              |                                 |                           | DO.                                    |      |
| May 9-9  | 5         | 1.726        | 3         |              |                    |                 | 5.09                       |                              |                              | 79      | 68      | 11:54PM      | 5:10AM       | 1.629           | 12.44        | 12:33                           | 4.476                     | Fallow, hard, moist, subsoil moist.    |      |
| May 10   | 5         | 1.726        | 3         |              |                    |                 | 1.28                       |                              |                              | 76      | 60      | No record    |              |                 |              |                                 |                           | DO.                                    |      |
| May 18   | 3         | 7.936        | 2         |              |                    |                 | 5.08                       |                              |                              | 72      | 64      | NRO          |              |                 |              |                                 |                           | Soil wet, subsoil moist                |      |
| May 18   | 4         | 5.747        | 1         | 3:08PM       | 35                 |                 | 0.07                       |                              |                              | 72      | 64      | NRO          |              |                 |              |                                 |                           | Corn 30", good, soil wet, cultivated.  |      |
| May 18   | 5         | 1.726        | 3         |              |                    |                 | 0.05                       |                              |                              | 72      | 64      | NRO          |              |                 |              |                                 |                           | Fallow, hard, moist, subsoil moist.    |      |
| May 22   | 3         | 7.936        | 2         |              |                    |                 | 0.31                       |                              |                              | 71      | 68      | NRO          |              |                 |              |                                 |                           | Soil moist; subsoil moist.             |      |
| May 22   | 4         | 5.747        | 1         | 1:35PM       | 145                |                 | 0.34                       |                              | 5/                           | 71      | 68      | NRO          |              |                 |              |                                 |                           | Corn 3', loose, moist, subsoil wet.    |      |
| May 22   | 5         | 1.726        | 3         |              |                    |                 | 0.36                       |                              |                              | 71      | 68      | NRO          |              |                 |              |                                 |                           | Fallow, hard, dry, subsoil moist.      |      |
| May 25   | 3         | 7.936        | 2         |              |                    |                 | 0.54                       |                              |                              | 70      | 67      | NRO          |              |                 |              |                                 |                           | Soil moist; subsoil moist.             |      |
| May 25   | 4         | 5.747        | 1         |              |                    |                 | 0.13                       |                              |                              | 75      | 66      | NRO          |              |                 |              |                                 |                           | DO.                                    |      |
| May 25   | 5         | 1.726        | 3         |              |                    |                 | 0.67                       |                              |                              | 75      | 66      | NRO          |              |                 |              |                                 |                           | Soil moist; subsoil moist.             |      |
| May 25   | 4         | 5.747        | 1         | 3:24PM       | 190                |                 | 0.50                       |                              | 0.80                         | 70      | 67      | NRO          |              |                 |              |                                 |                           | Corn 3', soil wet, subsoil wet.        |      |
| May 25   | 4         | 5.747        | 1         | 1:32PM       | 10                 |                 | 0.12                       |                              | 0.72                         | 75      | 66      | NRO          |              |                 |              |                                 |                           | DO.                                    |      |
| May 25   | 5         | 1.726        | 3         |              |                    |                 | 0.62                       |                              |                              | 70      | 67      | NRO          |              |                 |              |                                 |                           | Corn 3', soil wet, subsoil wet.        |      |
| May 25   | 5         | 1.726        | 3         |              |                    |                 | 0.15                       |                              |                              | 75      | 66      | NRO          |              |                 |              |                                 |                           | DO.                                    |      |
| May 25   | 5         | 1.726        | 3         |              |                    |                 | 0.56                       |                              |                              | 75      | 66      | NRO          |              |                 |              |                                 |                           | Fallow, loose, dry, subsoil moist.     |      |
| May 28   | 3         | 7.936        | 2         |              |                    |                 | 0.82                       |                              |                              | 71      | 65      | NRO          |              |                 |              |                                 |                           | DO.                                    |      |
| May 28   | 4         | 5.747        | 1         | 2:24PM       | 155                |                 | 0.70                       |                              |                              | 71      | 65      | No Record    |              |                 |              |                                 |                           | Soil moist, subsoil moist.             |      |
| May 28   | 5         | 1.726        | 3         |              |                    |                 | 0.70                       |                              |                              | 71      | 65      | NRO          |              |                 |              |                                 |                           | Corn 3', soil wet, subsoil wet         |      |
| July 1   | 1         | 7.076        | 0         |              |                    |                 | 2.00                       |                              |                              | 77      | 72      | NRO          |              |                 |              |                                 |                           | Fallow, loose, dry; sub-soil moist.    |      |
| July 1   | 4         | 5.747        | 1         | 1:12PM       | 1500               |                 | 1.95                       |                              |                              | 77      | 72      | No Record    |              |                 |              |                                 |                           | Soil dry; subsoil dry                  |      |
| July 1   | 5         | 1.726        | 3         |              |                    |                 | 2.21                       |                              |                              | 77      | 72      | No Record    |              |                 |              |                                 |                           | Corn 5' of soil, subsoil, dry          |      |
| July 4   | 3         | 7.936        | 2         |              |                    |                 | 0.42                       |                              |                              | 77      | 69      | NRO          |              |                 |              |                                 |                           | Cotton 6-10", poor, loose, dry.        |      |
| July 4   | 4         | 5.747        | 1         | 12:17AM      | 35                 |                 | 0.33                       |                              |                              | 77      | 69      | NRO          |              |                 |              |                                 |                           | Soil moist, subsoil moist              |      |
| July 4   | 5         | 1.726        | 3         |              |                    |                 | 0.32                       |                              |                              | 77      | 69      | NRO          |              |                 |              |                                 |                           | Corn 5-6", wet, subsoil, subsoil damp. |      |



UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
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MONTH Jul. Aug. & Sept., 1936

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

PROJECT

SHEET 3 OF 5

SHEETS

| Date     | WATERSHED |              | RAINFALL |              |                    |                 |                             |                              | TEMPERATURE (degrees F)      |         | RUN-OFF |              |              |                 | RAINFALL MINUTE (inches) | Rte. Loss (tons per acre) | COMMENTS ON WATERSHED                  |              |      |
|----------|-----------|--------------|----------|--------------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|---------|---------|--------------|--------------|-----------------|--------------------------|---------------------------|----------------------------------------|--------------|------|
|          | Number    | Area (acres) | Open No. | Begin (hour) | Duration (minutes) | Amount (inches) | MAXIMUM INTENSITY           |                              |                              | Maximum | Minimum | Begin (hour) | Ret'd (hour) | Amount (inches) |                          |                           |                                        | MAXIMUM RATE |      |
|          |           |              |          |              |                    |                 | 8 minutes (inches per hour) | 16 minutes (inches per hour) | 30 minutes (inches per hour) |         |         |              |              |                 |                          |                           |                                        | Cu. ft. sec. | Time |
| (1)      | (2)       | (3)          | (4)      | (5)          | (6)                | (7)             | (8)                         | (9)                          | (10)                         | (11)    | (12)    | (13)         | (14)         | (15)            | (16)                     | (17)                      | (18)                                   |              |      |
| 1936     |           |              |          |              |                    |                 |                             |                              |                              |         |         |              |              |                 |                          |                           |                                        |              |      |
| July 5   | 3         | 7.936        | 2-P-5b   |              |                    | 0.12            |                             |                              |                              | 75      | 70      | MRO          |              |                 |                          |                           | Soil moist; subsoil moist; subsoil     |              |      |
| July 5   | 4         | 5.747        | 1-P-C    | 4:32 PM      | 33                 | 0.10            |                             | 0.32                         | 0.22                         | 75      | 70      | MRO          |              |                 |                          |                           | Corn 5-6', soil wet, hard, wet.        |              |      |
| July 5   | 5         | 1.726        | 3-P-A    |              |                    | 0.12            |                             |                              |                              | 75      | 70      | MRO          |              |                 |                          |                           | Cotton 8-10", poor, soil loose, moist  |              |      |
| July 10  | 3         | 7.936        | 2-P-5b   |              |                    | 0.02            |                             |                              |                              | 90      | 72      | MRO          |              |                 |                          |                           | Soil dry; subsoil dry                  |              |      |
| July 10  | 4         | 5.747        | 1-P-C    | 2:40 PM      | 25                 | 0.05            |                             |                              |                              | 90      | 72      | MRO          |              |                 |                          |                           | Corn 5-6', wet, hard, subsoil damp.    |              |      |
| July 10  | 5         | 1.726        | 3-P-A    |              |                    | 0.15            |                             |                              |                              | 90      | 72      | MRO          |              |                 |                          |                           | Newly cultivated, subsoil damp.        |              |      |
| July 13  | 3         | 7.936        | 2-P-5b   |              |                    | 0.27            |                             |                              |                              | 92      | 72      | MRO          |              |                 |                          |                           | Soil dry; subsoil dry                  |              |      |
| July 13  | 4         | 5.747        | 1-P-C    | 9:05 PM      | 15                 | 0.32            |                             | 1.08                         | 0.54                         | 92      | 72      | MRO          |              |                 |                          |                           | Corn 5-6', wet, hard, subsoil damp     |              |      |
| July 13  | 5         | 1.726        | 3-P-A    |              |                    | 0.38            |                             |                              |                              | 92      | 72      | MRO          |              |                 |                          |                           | Newly cultivated, subsoil damp.        |              |      |
| July 22  | 25        | 7.936        | 2-P-5b   |              | 70                 | 1.81            |                             | 1.68                         |                              |         |         | MRO          |              |                 |                          |                           | Soil dry; subsoil dry                  |              |      |
| July 22  | 4         | 5.747        | 1-P-C    | 11:47 AM     | 65                 | 2.08            |                             | 6.00                         | 3.18                         | 75      | 75      | MRO          | 12:00 M.     | 0.027           | 0.71                     | 12:12                     | Corn 5-6', moist, baked, subsoil moist |              |      |
| July 22  | 5         | 1.726        | 3-P-A    |              | 65                 | 2.03            |                             |                              |                              | 75      | 75      | MRO          | 11:57 AM     | 12:31 PM        | 17.72                    | 12:12                     | Cotton 10-14", loose, soil moist.      |              |      |
| July 22  | 672       |              |          |              |                    | 2.08            |                             |                              |                              | 75      | 75      | MRO          | 11:57 AM     | 1:20 PM         | 4.20                     | 12:04                     | Cotton 10-14", loose, soil moist.      |              |      |
| Aug. 15  | 3         | 7.936        | 2-P-5b   |              |                    | 0.04            |                             |                              |                              | 95      | 75      | MRO          |              |                 |                          |                           | Soil dry; subsoil dry.                 |              |      |
| Aug. 15  | 4         | 5.747        | 1-P-C    | 2:45 PM      | 30                 | 0.03            |                             |                              |                              | 95      | 75      | MRO          |              |                 |                          |                           | Corn 5-6', moist, baked, subsoil moist |              |      |
| Aug. 15  | 5         | 1.726        | 3-P-A    |              |                    | 0.03            |                             |                              |                              | 95      | 75      | MRO          |              |                 |                          |                           | Cotton 20", sparse, subsoil dry.       |              |      |
| Aug. 23  | 3         | 7.936        | 2-P-5b   |              |                    | 0.20            |                             |                              |                              | 80      | 76      | MRO          |              |                 |                          |                           | Soil dry; subsoil dry                  |              |      |
| Aug. 23  | 4         | 5.747        | 1-P-C    | 3:55 PM      | 15                 | 0.20            |                             | 0.76                         | 0.38                         | 80      | 76      | MRO          |              |                 |                          |                           | Corn 5-6', soil moist, subsoil dry     |              |      |
| Aug. 23  | 5         | 1.726        | 3-P-A    |              |                    | 0.20            |                             |                              |                              | 80      | 76      | MRO          |              |                 |                          |                           | Cotton 20", sparse, loose soil dry.    |              |      |
| Aug. 24  | 3         | 7.936        | 2-P-5b   |              |                    | 0.12            |                             |                              |                              | 90      | 71      | MRO          |              |                 |                          |                           | Soil dry; subsoil dry                  |              |      |
| Aug. 24  | 4         | 5.747        | 1-P-C    | 4:40 PM      | 30                 | 0.11            |                             | 0.12                         | 0.06                         | 90      | 71      | MRO          |              |                 |                          |                           | Corn 5-6', moist, subsoil dry, sub-    |              |      |
| Aug. 24  | 5         | 1.726        | 3-P-A    |              |                    | 0.12            |                             |                              |                              | 90      | 71      | MRO          |              |                 |                          |                           | Cotton 20", sparse, loose soil dry.    |              |      |
| Aug. 25  | 3         | 7.936        | 2-P-5b   |              |                    | 0.08            |                             |                              |                              | 87      | 74      | MRO          |              |                 |                          |                           | Soil dry; subsoil dry, hard, subsoil   |              |      |
| Aug. 25  | 4         | 5.747        | 1-P-C    | 4:30 PM      | 10                 | 0.05            |                             | 2/                           | 2/                           | 87      | 74      | MRO          |              |                 |                          |                           | Corn mature, soil dry, light dry.      |              |      |
| Aug. 25  | 5         | 1.726        | 3-P-A    |              |                    | 0.03            |                             |                              |                              | 87      | 74      | MRO          |              |                 |                          |                           | Cotton 20", sparse, subsoil dry.       |              |      |
| Sept. 14 | 3         | 7.936        | 2-P-5b   |              |                    | 0.06            |                             |                              |                              | 77      | 73      | MRO          |              |                 |                          |                           | Soil dry; subsoil dry                  |              |      |
| Sept. 14 | 4         | 5.747        | 1-P-C    | 4:27 PM      | 05                 | 0.07            |                             | 2/                           | 2/                           | 77      | 73      | MRO          |              |                 |                          |                           | Corn stalks, soil dry, hard, subsoil   |              |      |
| Sept. 14 | 5         | 1.726        | 3-P-A    |              |                    | 0.10            |                             |                              |                              | 77      | 73      | MRO          |              |                 |                          |                           | Cotton 20", sparse, subsoil dry.       |              |      |
| Sept. 15 | 3         | 7.936        | 2-P-5b   |              |                    | 1.49            |                             |                              |                              | 75      | 70      | MRO          | 11:40 PM     | No Rate         |                          |                           | Soil dry, subsoil dry.                 |              |      |
| Sept. 15 | 4         | 5.747        | 1-P-C    | 2:21 PM      | 158                | 1.09            |                             | 0.80                         | 1.88                         | 75      | 70      | MRO          | 11:40 PM     | No Rate         |                          |                           | Soil dry, loose, subsoil damp          |              |      |
| Sept. 15 | 5         | 1.726        | 3-P-A    |              |                    | 1.36            |                             |                              |                              | 75      | 70      | MRO          | 11:40 PM     | No Rate         |                          |                           | Cotton 21-30", loose dry, subsoil      |              |      |
| Sept. 24 | 4         | 5.747        | 1-P-C    | 7:27 PM      | 130                | 0.03            |                             |                              |                              | 83      | 73      | MRO          |              |                 |                          |                           | Yellow, dry, loose, subsoil moist, dry |              |      |
| Sept. 25 | 3         | 7.936        | 2-P-5b   |              |                    | 0.10            |                             |                              |                              | 87      | 67      | MRO          |              |                 |                          |                           | Soil moist, subsoil moist              |              |      |
| Sept. 25 | 4         | 5.747        | 1-P-C    | 6:45 PM      | 55                 | 0.06            |                             |                              |                              | 87      | 67      | MRO          |              |                 |                          |                           | Soil moist, subsoil moist, soil moist  |              |      |
| Sept. 25 | 5         | 1.726        | 3-P-A    |              |                    | 0.10            |                             |                              |                              | 87      | 67      | MRO          |              |                 |                          |                           | Cotton 21-30", moist, soil moist, soil |              |      |





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH
Month Sept. Oct. Nov. & Dec., 1936Sheet 4 of 5 SHEETS
 PROJECT SCS Experiment Station, Taylor, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date       | WATERSHED |                 | RAINFALL  |                       |                    |                                | TEMPERATURE<br>(degrees F.)     |                                 | RUN-OFF        |                    |                    |                               | Rainfall Excess<br>(inches) | Run Loss<br>(acre feet) | Character of Watershed                       |
|------------|-----------|-----------------|-----------|-----------------------|--------------------|--------------------------------|---------------------------------|---------------------------------|----------------|--------------------|--------------------|-------------------------------|-----------------------------|-------------------------|----------------------------------------------|
|            | Number    | Area<br>(acres) | Time N.Y. | Duration<br>(minutes) | Amount<br>(inches) | 8 minutes<br>(inches per hour) | 18 minutes<br>(inches per hour) | 30 minutes<br>(inches per hour) | Peak<br>(hour) | Finished<br>(hour) | Amount<br>(inches) | Maximum Rate<br>Cu ft per sec | Time                        |                         |                                              |
| (1)        | (2)       | (3)             | (4)       | (5)                   | (6)                | (7)                            | (8)                             | (9)                             | (10)           | (11)               | (12)               | (13)                          | (14)                        | (15)                    | (16)                                         |
| Sept. 26   | 3         | 7,936           | 2-PM      |                       | 0.92               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | Soil moist, subsoil moist                    |
| Sept. 26   | 4         | 5,717           | 1-C       |                       | 0.91               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | Fallow, crusted, moist, subsoil moist        |
| Sept. 26   | 5         | 1,726           | 3-A       | 8:53AM                | 65                 | 0.90                           | 1.16                            |                                 | NR0            |                    |                    |                               |                             |                         | Cotton 21-30, crusted, dry, damp             |
| Sept. 27   | 3         | 7,936           | 2-PM      |                       | 0.21               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | Soil moist, subsoil moist                    |
| Sept. 27   | 4         | 5,717           | 1-C       |                       | 0.21               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | Fallow, crusted, moist, subsoil moist        |
| Sept. 27   | 5         | 1,726           | 3-A       | 5:53PM                | 105                | 0.25                           | 0.36                            |                                 | NR0            |                    |                    |                               |                             |                         | Cotton 21-30, crusted, dry, damp             |
| Oct. 6-7   | 3         | 7,936           | 2-PM      |                       | 2.53               |                                |                                 |                                 | 11:11AM        | 1:12AM             | 0.042              | 1.31                          | 12:17                       | 2.403                   | Soil moist, subsoil moist                    |
| Oct. 6-7   | 4         | 5,717           | 1-C       |                       | 2.34               |                                |                                 |                                 | 11:09PM        | 12:11AM            | 0.390              | 11.17                         | 12:21                       | 1.950                   | 0.31 Fallow, soil moist, subsoil moist       |
| Oct. 6-7   | 5         | 1,726           | 3-A       | 10:10AM               | 410                | 2.21                           | 2.56                            | 1.72                            | 11:10AM        | 1:03AM             | 0.177              | 1.24                          | 12:16                       | 2.033                   | 0.33 Cotton 21-30, mature, moist, baked      |
| Oct. 22-23 | 3         | 7,936           | 2-PM      |                       | 2.55               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | Soil moist, subsoil moist                    |
| Oct. 22-23 | 4         | 5,717           | 1-C       |                       | 2.35               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | 0.00 Fallow, newly cultivated, subsoil moist |
| Oct. 22-23 | 5         | 1,726           | 3-A       | 8:50AM                | 170                | 2.27                           | 1.16                            | 0.36                            | 11:11AM        | 1:03AM             | 0.011              | No Rate                       |                             | 2.339                   | 0.01 Cotton, mature, soil wet, subsoil wet   |
| Oct. 28    | 3         | 7,936           | 2-PM      |                       | 0.12               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | Soil moist, subsoil moist                    |
| Oct. 28    | 4         | 5,717           | 1-C       |                       | 0.12               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | 0.00 Fallow, soil moist, subsoil moist       |
| Oct. 28    | 5         | 1,726           | 3-A       | 6:00AM                | 110                | 0.12                           | 0.12                            | 0.08                            | NR0            |                    |                    |                               |                             |                         | 0.01 Cotton, mature, soil wet, subsoil wet   |
| Nov. 1     | 3         | 7,936           | 2-PM      |                       | 0.04               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | Soil moist, subsoil moist                    |
| Nov. 1     | 4         | 5,717           | 1-C       |                       | 0.03               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | 0.00 Fallow, soil moist, subsoil moist       |
| Nov. 1     | 5         | 1,726           | 3-A       | 7:10AM                | 70                 | 0.07                           | 0.12                            | 0.08                            | NR0            |                    |                    |                               |                             |                         | 0.00 Cotton, mature, soil wet, subsoil wet   |
| Nov. 2-3   | 3         | 7,936           | 2-PM      |                       | 1.11               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | Soil moist, subsoil moist                    |
| Nov. 2-3   | 4         | 5,717           | 1-C       |                       | 0.95               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | 0.01 Fallow, good stand, soil moist          |
| Nov. 2-3   | 5         | 1,726           | 3-A       | 11:40PM               | 205                | 1.03                           | 1.00                            | 0.56                            | NR0            |                    |                    |                               |                             |                         | 0.00 Cotton, mature, moist, subsoil wet      |
| Nov. 23    | 3         | 7,936           | 2-PM      |                       | 0.47               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | Soil moist, subsoil moist                    |
| Nov. 23    | 4         | 5,717           | 1-C       |                       | 0.42               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | 0.01 Fallow, soil moist, subsoil moist       |
| Nov. 23    | 5         | 1,726           | 3-A       | 5:53AM                | 150                | 0.43                           | 0.12                            | 0.08                            | NR0            |                    |                    |                               |                             |                         | 0.00 Cotton, mature, moist, subsoil wet      |
| Nov. 29    | 3         | 7,936           | 2-PM      |                       | 0.51               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | Soil moist, subsoil moist                    |
| Nov. 29    | 4         | 5,717           | 1-C       |                       | 0.45               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | 0.01 Fallow, good stand, soil moist          |
| Nov. 29    | 5         | 1,726           | 3-A       | 3:00PM                | 900                | 0.53                           | 0.20                            | 0.18                            | NR0            |                    |                    |                               |                             |                         | 0.00 Cotton, mature, moist, subsoil wet      |
| Nov. 29    | 3         | 7,936           | 2-PM      |                       | 0.47               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | Soil moist, subsoil moist                    |
| Nov. 29    | 4         | 5,717           | 1-C       |                       | 0.42               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | 0.01 Fallow, soil moist, subsoil moist       |
| Nov. 29    | 5         | 1,726           | 3-A       | 5:53AM                | 150                | 0.43                           | 0.12                            | 0.08                            | NR0            |                    |                    |                               |                             |                         | 0.00 Cotton, mature, moist, subsoil wet      |
| Dec. 1-2   | 3         | 7,936           | 2-PM      |                       | 0.70               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | Soil moist, subsoil moist                    |
| Dec. 1-2   | 4         | 5,717           | 1-C       |                       | 0.65               |                                |                                 |                                 | NR0            |                    |                    |                               |                             |                         | 0.01 Fallow, good stand, soil moist          |
| Dec. 1-2   | 5         | 1,726           | 3-A       | 12:14PM               | 1030               | 0.64                           | 0.08                            | 0.04                            | NR0            |                    |                    |                               |                             |                         | 0.00 Cotton, mature, moist, subsoil wet      |





PROJECT 808 Experiment Station, Tyler, Texas

[illegible]



6A

APRIL 28, 1946

4 DO

WAVE OF RAINFALL

Accumulated rainfall in inches  
Rainfall in inches per hour

ACCUMULATED RAINFALL

Area R.O. 6.8-5 = .151" at 8:10 AM

| RAINFALL TABULATION |              |             |             |                | RAINFALL TABULATION |              |             |             |                |
|---------------------|--------------|-------------|-------------|----------------|---------------------|--------------|-------------|-------------|----------------|
| (1)<br>(time)       | (2)<br>(min) | (3)<br>(in) | (4)<br>(in) | (5)<br>(in/hr) | (1)<br>(time)       | (2)<br>(min) | (3)<br>(in) | (4)<br>(in) | (5)<br>(in/hr) |
| 5:55 AM             | 20           | .00         | .05         | .15            | 10:41               | 5            | 2.35        | .01         | .12            |
| 5:55                | 2            | .07         | .02         | .05            | 10:56               | 12           | 2.34        | .05         | .15            |
| 6:01                | 16           | .14         | .03         | .10            | 11:03               | 5            | 2.38        | .01         | .12            |
| 6:05                | 4            | .12         | .02         | .10            | 11:06               | 5            | 2.39        | .01         | .12            |
| 6:10                | 3            | .15         | .05         | .15            | 11:53               | 27           | 2.12        | .03         | .07            |
| 6:18                | 2            | .20         | .05         | .20            | 12:26               | 55           | 2.12        | .00         | .00            |
| 6:20                | 2            | .23         | .05         | .23            | 12:37               | 9            | 2.12        | .02         | .13            |
| 6:25                | 5            | .25         | .06         | .25            | 12:54               | 17           | 2.59        | .15         | .55            |
| 6:30                | 3            | .30         | .06         | .30            | 3:13                | 14           | 2.52        | .14         | .41            |
| 6:34                | 6            | .36         | .10         | .36            | 3:50                | 25           | 2.59        | .02         | .05            |
| 6:38                | 4            | .40         | .16         | .40            |                     |              |             |             |                |
| 6:40                | 5            | .45         | .16         | .45            |                     |              |             |             |                |
| 6:45                | 5            | .50         | .14         | .50            |                     |              |             |             |                |
| 6:50                | 5            | .55         | .07         | .55            |                     |              |             |             |                |
| 6:55                | 5            | .60         | .08         | .60            |                     |              |             |             |                |
| 7:00                | 5            | .65         | .08         | .65            |                     |              |             |             |                |
| 7:05                | 5            | .70         | .08         | .70            |                     |              |             |             |                |
| 7:10                | 5            | .75         | .11         | .75            |                     |              |             |             |                |
| 7:15                | 5            | .80         | .07         | .80            |                     |              |             |             |                |
| 7:20                | 5            | .85         | .06         | .85            |                     |              |             |             |                |
| 7:25                | 5            | .90         | .08         | .90            |                     |              |             |             |                |
| 7:30                | 6            | .96         | .08         | .96            |                     |              |             |             |                |
| 7:35                | 11           | 1.07        | .08         | 1.07           |                     |              |             |             |                |
| 7:40                | 21           | 1.07        | .02         | .02            |                     |              |             |             |                |
| 8:05                | 10           | 1.09        | .02         | .12            |                     |              |             |             |                |
| 8:18                | 15           | 2.02        | .03         | .12            |                     |              |             |             |                |
| 8:33                | 5            | 2.05        | .01         | .12            |                     |              |             |             |                |
| 8:44                | 11           | 2.04        | .01         | .06            |                     |              |             |             |                |
| 9:05                | 20           | 2.05        | .00         | .00            |                     |              |             |             |                |
| 9:10                | 15           | 2.06        | .00         | .00            |                     |              |             |             |                |
| 9:15                | 23           | 2.11        | .05         | .10            |                     |              |             |             |                |
| 9:15                | 23           | 2.14        | .01         | .01            |                     |              |             |             |                |
| 10:01               | 19           | 2.19        | .05         | .17            |                     |              |             |             |                |
| 10:30               | 19           | 2.29        | .10         | .32            |                     |              |             |             |                |
| 10:40               | 19           | 2.31        | .02         | .07            |                     |              |             |             |                |
| 10:40               | 19           | 2.31        | .02         | .07            |                     |              |             |             |                |
|                     | 3            |             |             |                |                     |              |             |             |                |



Handwritten text in Arabic script, possibly a signature or date, located at the bottom center of the page.



1P 2 APRIL 28, 1936

ACC. RAINFALL 2.93  
(FIELD "C" 0.00E)

3 2 1 0

| AREA (acres)              | 0.8--3              | 0.5--4              | 0.5--5              |
|---------------------------|---------------------|---------------------|---------------------|
| INCREASING RATE (in)      | 7.94                | 5.75                | 1.73                |
| DATE OF PLANT             | 4/21/36             | 4/21/36             | 4/21/36             |
| DURATION (hours)          | 5 1/6               | 5 1/6               | 5 1/6               |
| TEMPERATURE (max. & min.) | 60-62               | 60-62               | 60-62               |
| WIND DIRECTION            | SW                  | SW                  | SW                  |
| WIND VELOCITY (m.p.h.)    | 0-10                | 0-10                | 0-10                |
| REL. HUM. (percent)       | 75-80               | 75-80               | 75-80               |
| MAX. WIND                 | 10                  | 10                  | 10                  |
| WIND TYPE                 | 1 1/2               | 1 1/2               | 1 1/2               |
| DATE LAST PLANTED         | 4/21/36             | 4/21/36             | 4/21/36             |
| SOIL LOSS (tons per acre) | none                | none                | none                |
| REMARKS                   | Duration field 3.50 | Duration field 3.50 | Duration field 3.50 |

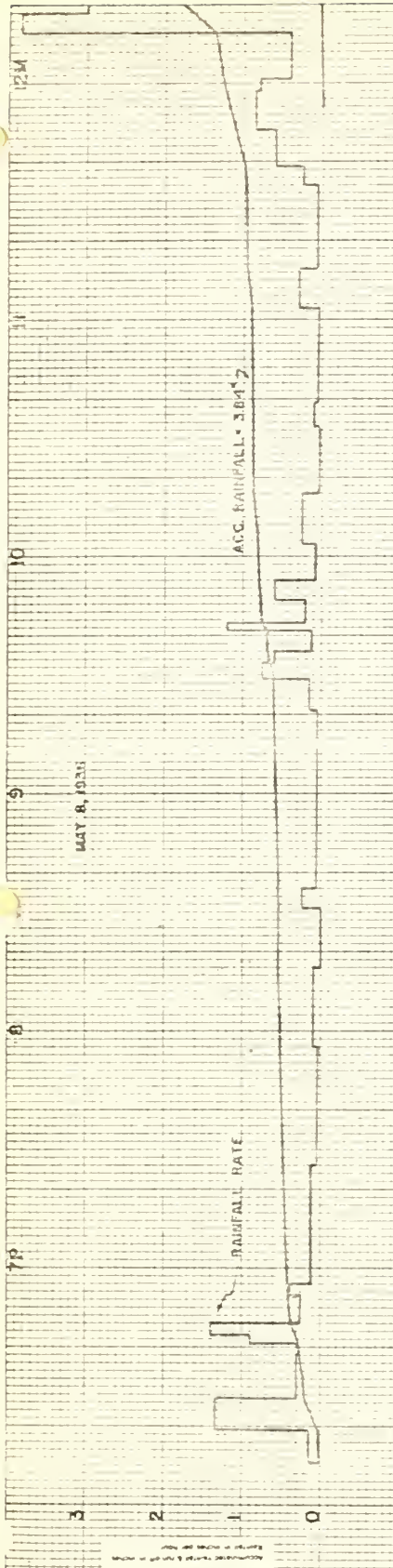
NO RECORD OF RUNOFF

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. R. BENNETT, CHIEF  
DIVISION OF RESEARCH, A.C. LUDWIG, CHIEF

STATION NO. \_\_\_\_\_ APRIL 20, 1936  
Plot by \_\_\_\_\_ date \_\_\_\_\_ checked by \_\_\_\_\_  
Computation by \_\_\_\_\_ date \_\_\_\_\_ checked by \_\_\_\_\_

Tyler, Texas  
April 28, 1936  
Sheet 2 of 2 Sheets





RAINFALL TABULATION

| (1)<br>(time) | (2)<br>(min) | (3)<br>(in) | (4)<br>(in) | (5)<br>(in/hr) |
|---------------|--------------|-------------|-------------|----------------|
| 6:11 PM       | 8            | .00         | .02         | .15            |
| 6:19          | 8            | .02         | .18         | 1.35           |
| 6:27          | 8            | .27         | .07         | .30            |
| 6:44          | 14           | .27         | .30         | .70            |
| 6:45          | 2            | .30         | .05         | .70            |
| 6:46          | 3            | .37         | .07         | 1.10           |
| 6:53          | 7            | .40         | .05         | .25            |
| 6:56          | 3            | .42         | .02         | .10            |
| 7:06          | 10           | .48         | .06         | .12            |
| 7:16          | 10           | .53         | .05         | .10            |
| 7:26          | 10           | .53         | .05         | .07            |
| 8:31          | 15           | .53         | .00         | .00            |
| 8:36          | 5            | .55         | .02         | .24            |
| 9:01          | 16           | .58         | .05         | .04            |
| 9:09          | 8            | .60         | .02         | .15            |
| 9:53          | 4            | .65         | .05         | .75            |
| 9:56          | 3            | .68         | .05         | .60            |
| 9:44          | 2            | .69         | .01         | .20            |
| 9:45          | 2            | .70         | .01         | .10            |
| 9:46          | 6            | .75         | .02         | .20            |
| 9:46          | 5            | .80         | .05         | .50            |
| 10:03         | 9            | .81         | .01         | .07            |
| 10:16         | 13           | .86         | .05         | .23            |
| 10:53         | 17           | .87         | .01         | .04            |
| 10:59         | 6            | .88         | .01         | .10            |
| 11:05         | 24           | .90         | .02         | .05            |
| 11:11         | 2            | .94         | .04         | .10            |
| 11:13         | 2            | .94         | .04         | .10            |
| 11:54         | 21           | .97         | .02         | .06            |
| 11:59         | 5            | .99         | .02         | .24            |
| 11:48         | 9            | 1.08        | .09         | .59            |
| 11:48         | 10           | 1.22        | .14         | .84            |
| 12:00 AM      | 3            | 1.26        | .04         | .90            |
| 12:07         | 6            | 1.30        | .04         | .10            |
| 12:13         | 6            | 1.34        | .04         | .10            |
| 12:16         | 5            | 1.66        | .25         | 3.00           |

G.S. - 4 NO RECORD

Tyler, Texas  
May 10, 1938  
Sheet 1 of 3





1220P 140 2

4

3

2

ACC. RAINFALL - 3.04"

MAY 9, 1936

0.8-5 Acc. R.O. = 1.05" at 9:15AM

0.8-5 Acc. R.O. = 1.65" at 3:00PM

Accumulated Rainfall - 6.69" at 10:00 PM

Discharge in Second Feet

RAINFALL TABULATION

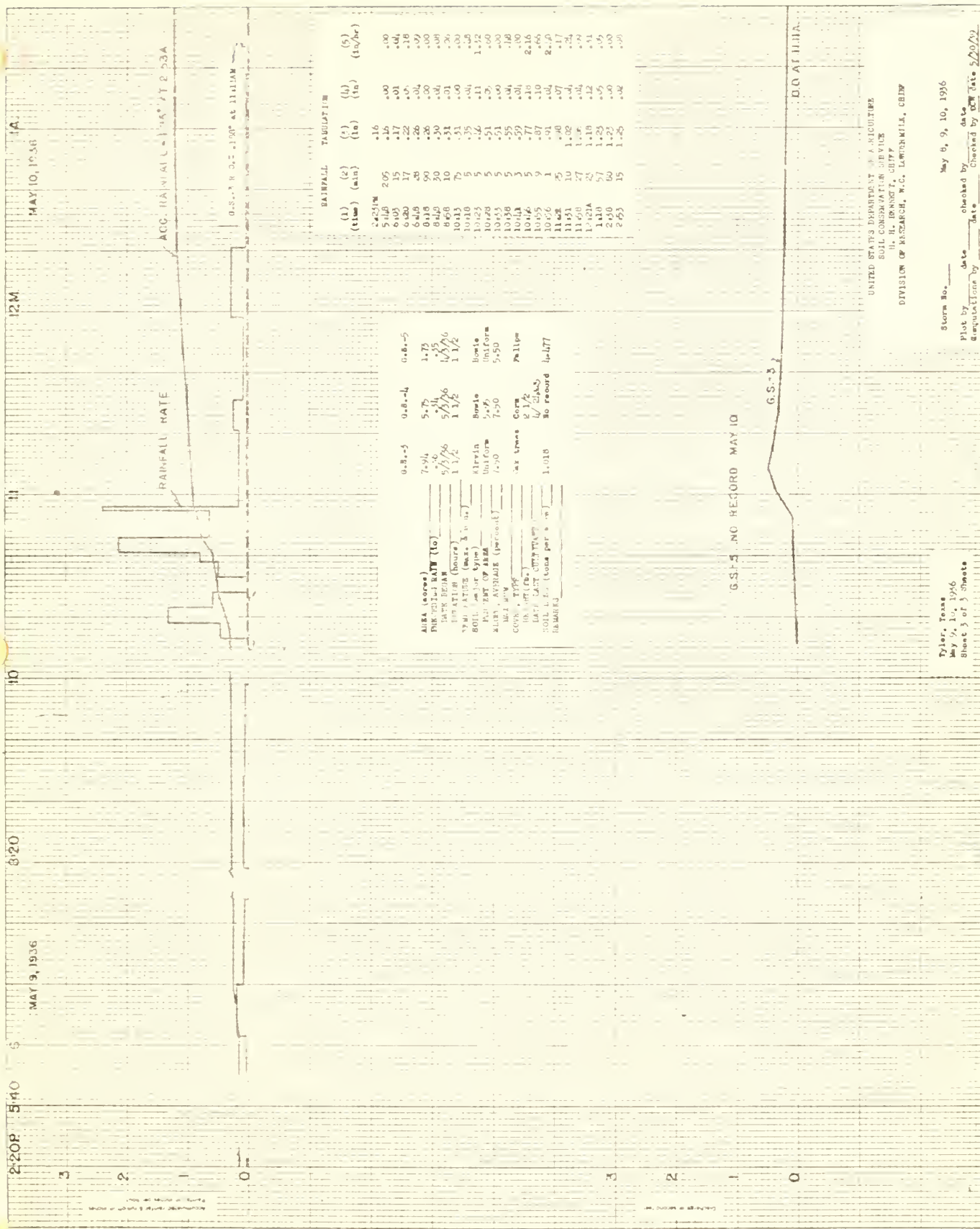
| (1)<br>(time) | (2)<br>(min) | (3)<br>(in) | (4)<br>(in) | (5)<br>(in/hr) |
|---------------|--------------|-------------|-------------|----------------|
| 12:27AM       | 4            | 1.51        | .16         | 2.70           |
| 12:27         | 2            | 2.06        | .11         | 0.56           |
| 12:28         | 2            | 2.08        | .13         | 7.80           |
| 12:32         | 1            | 2.19        | .13         | 7.80           |
| 12:34         | 2            | 2.22        | .09         | 2.70           |
| 12:36         | 2            | 2.71        | .18         | 5.10           |
| 12:39         | 3            | 2.89        | .21         | 4.20           |
| 12:41         | 12           | 3.10        | .06         | .50            |
| 12:48         | 7            | 3.16        | .08         | .79            |
| 1:00          | 8            | 3.14        | .17         | 1.15           |
| 1:05          | 5            | 3.10        | .01         | .20            |
| 1:10          | 15           | 3.15        | .01         | .12            |
| 1:24          | 5            | 3.16        | .04         | .48            |
| 1:48          | 19           | 3.50        | .02         | .06            |
| 2:00          | 12           | 3.52        | .05         | .15            |
| 2:05          | 3            | 3.55        | .07         | 1.10           |
| 2:16          | 15           | 3.52        | .04         | .10            |
| 2:24          | 8            | 3.66        | .05         | .25            |
| 2:31          | 10           | 3.79        | .05         | .16            |
| 2:38          | 8            | 3.75        | .08         | .48            |
| 2:43          | 2            | 3.75        | .01         | .50            |
| 3:16          | 25           | 3.77        | .01         | .02            |
| 3:21          | 5            | 3.73        | .01         | .12            |
| 3:36          | 15           | 3.79        | .01         | .04            |
| 3:56          | 20           | 3.80        | .01         | .03            |
| 4:01          | 5            | 3.81        | .02         | .41            |
| 6:26          | 116          | 3.85        | .00         | .00            |
| 6:56          | 50           | 3.40        | .01         | .02            |
| 12:00PM       | 8            | .00         | .02         | .24            |
| 12:25         | 5            | .02         | .00         | .00            |
| 1:41          | 76           | .02         | .00         | .00            |
| 1:46          | 4            | .10         | .08         | 1.20           |
| 1:55          | 8            | .12         | .02         | .15            |
| 2:01          | 8            | .15         | .05         | .25            |
| 2:01          | 22           | .01         | .01         | .01            |

0.041 8.00A

Tyler, Texas  
May 11, 10, 1936  
Street of 3 Streets







G.S. 1 NO RECORD MAY 10

G.S. 2

DO AT 11:11A

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
DIVISION OF RESEARCH, W.C. LUTHERVILLE, GEORGIA

Tyler, Texas  
May 10, 1936  
Sheet 3 of 3 Sheets

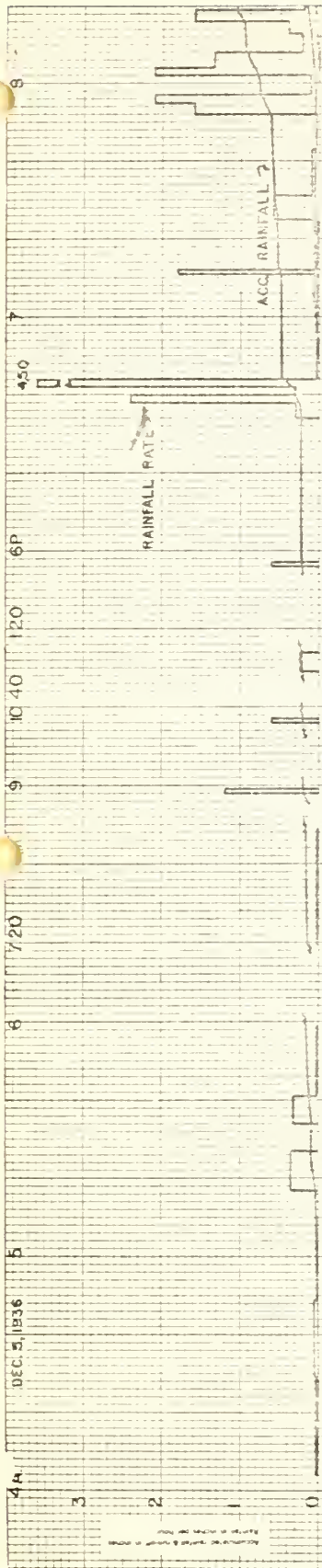
Storm No. \_\_\_\_\_  
Plot by \_\_\_\_\_ Date \_\_\_\_\_  
Checked by \_\_\_\_\_ Date \_\_\_\_\_  
Computation by \_\_\_\_\_ Date \_\_\_\_\_









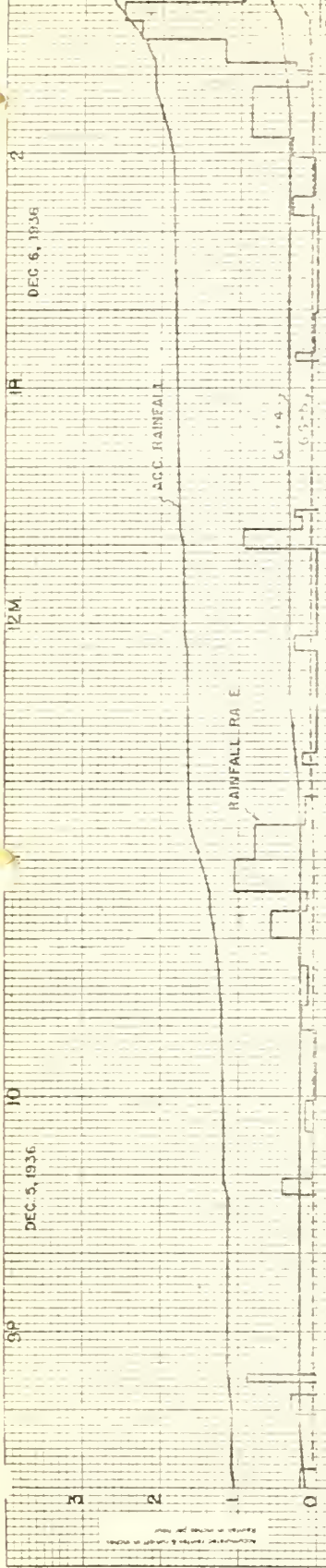


| RAINFALL      |              | TABULATION  |             |                |             |
|---------------|--------------|-------------|-------------|----------------|-------------|
| (1)<br>(time) | (2)<br>(min) | (3)<br>(in) | (4)<br>(in) | (5)<br>(in/hr) | (6)<br>(in) |
| 4:00 AM       | 25           | .01         | .01         | .02            |             |
| 4:05          | 20           | .03         | .03         | .06            |             |
| 4:10          | 20           | .03         | .03         | .06            |             |
| 4:15          | 10           | .09         | .06         | .36            |             |
| 4:20          | 10           | .09         | .06         | .36            |             |
| 4:25          | 7            | .13         | .04         | .05            |             |
| 4:30          | 18           | .11         | .00         | .00            |             |
| 4:35          | 30           | .16         | .02         | .00            |             |
| 4:40          | 30           | .16         | .02         | .00            |             |
| 4:45          | 59           | .13         | .02         | 1.20           |             |
| 4:50          | 1            | .19         | .00         | .00            |             |
| 4:55          | 7            | .19         | .01         | .00            |             |
| 5:00 PM       | 52           | .15         | .00         | .00            |             |
| 5:05          | 5            | .21         | .00         | .00            |             |
| 5:10          | 1            | .22         | .01         | .00            |             |
| 5:15          | 1            | .22         | .02         | .00            |             |
| 5:20          | 4            | .38         | .01         | .19            |             |
| 5:25          | 1            | .32         | .04         | 2.10           |             |
| 5:30          | 1            | .33         | .01         | .50            |             |
| 5:35          | 2            | .48         | .15         | 4.50           |             |
| 5:40          | 27           | .01         | .01         | .02            |             |
| 5:45          | 1            | .52         | .03         | 1.80           |             |
| 5:50          | 13           | .53         | .01         | .05            |             |
| 5:55          | 6            | .59         | .02         | .10            |             |
| 6:00          | 12           | .62         | .01         | .07            |             |
| 6:05          | 1            | .70         | .00         | 1.60           |             |
| 6:10          | 2            | .77         | .07         | 2.10           |             |
| 6:15          | 5            | .78         | .01         | .12            |             |
| 6:20          | 2            | .95         | .09         | 1.15           |             |
| 6:25          | 1            | .96         | .02         | .03            |             |
| 6:30          | 5            | 1.06        | .08         | 1.00           |             |
| 6:35          | 2            |             | .02         | .20            |             |

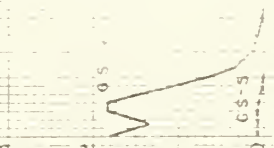
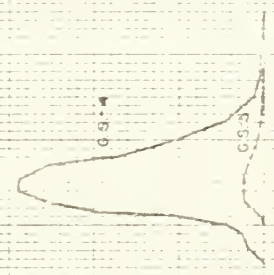


Tyler, To an  
Sheet 1 of 3  
Sheet 1 of 3





| RAINFALL TABULATION |              |             |                |
|---------------------|--------------|-------------|----------------|
| (1)<br>(time)       | (2)<br>(min) | (3)<br>(in) | (4)<br>(in/hr) |
| 11:27               | 26           | 1.65        | .01            |
| 11:55               | 4            | 1.66        | .02            |
| 12:01               | 22           | 1.57        | .01            |
| 12:04               | 5            | 1.77        | .08            |
| 12:07               | 2            | 1.79        | .01            |
| 12:08               | 2            | 1.79        | .01            |
| 12:09               | 2            | 1.79        | .01            |
| 12:10               | 2            | 1.79        | .01            |
| 12:11               | 2            | 1.79        | .01            |
| 12:12               | 2            | 1.79        | .01            |
| 12:13               | 2            | 1.79        | .01            |
| 12:14               | 2            | 1.79        | .01            |
| 12:15               | 2            | 1.79        | .01            |
| 12:16               | 2            | 1.79        | .01            |
| 12:17               | 2            | 1.79        | .01            |
| 12:18               | 2            | 1.79        | .01            |
| 12:19               | 2            | 1.79        | .01            |
| 12:20               | 2            | 1.79        | .01            |
| 12:21               | 2            | 1.79        | .01            |
| 12:22               | 2            | 1.79        | .01            |
| 12:23               | 2            | 1.79        | .01            |
| 12:24               | 2            | 1.79        | .01            |
| 12:25               | 2            | 1.79        | .01            |
| 12:26               | 2            | 1.79        | .01            |
| 12:27               | 2            | 1.79        | .01            |
| 12:28               | 2            | 1.79        | .01            |
| 12:29               | 2            | 1.79        | .01            |
| 12:30               | 2            | 1.79        | .01            |
| 12:31               | 2            | 1.79        | .01            |
| 12:32               | 2            | 1.79        | .01            |
| 12:33               | 2            | 1.79        | .01            |
| 12:34               | 2            | 1.79        | .01            |
| 12:35               | 2            | 1.79        | .01            |
| 12:36               | 2            | 1.79        | .01            |
| 12:37               | 2            | 1.79        | .01            |
| 12:38               | 2            | 1.79        | .01            |
| 12:39               | 2            | 1.79        | .01            |
| 12:40               | 2            | 1.79        | .01            |
| 12:41               | 2            | 1.79        | .01            |
| 12:42               | 2            | 1.79        | .01            |
| 12:43               | 2            | 1.79        | .01            |
| 12:44               | 2            | 1.79        | .01            |
| 12:45               | 2            | 1.79        | .01            |
| 12:46               | 2            | 1.79        | .01            |
| 12:47               | 2            | 1.79        | .01            |
| 12:48               | 2            | 1.79        | .01            |
| 12:49               | 2            | 1.79        | .01            |
| 12:50               | 2            | 1.79        | .01            |
| 12:51               | 2            | 1.79        | .01            |
| 12:52               | 2            | 1.79        | .01            |
| 12:53               | 2            | 1.79        | .01            |
| 12:54               | 2            | 1.79        | .01            |
| 12:55               | 2            | 1.79        | .01            |
| 12:56               | 2            | 1.79        | .01            |
| 12:57               | 2            | 1.79        | .01            |
| 12:58               | 2            | 1.79        | .01            |
| 12:59               | 2            | 1.79        | .01            |
| 13:00               | 2            | 1.79        | .01            |

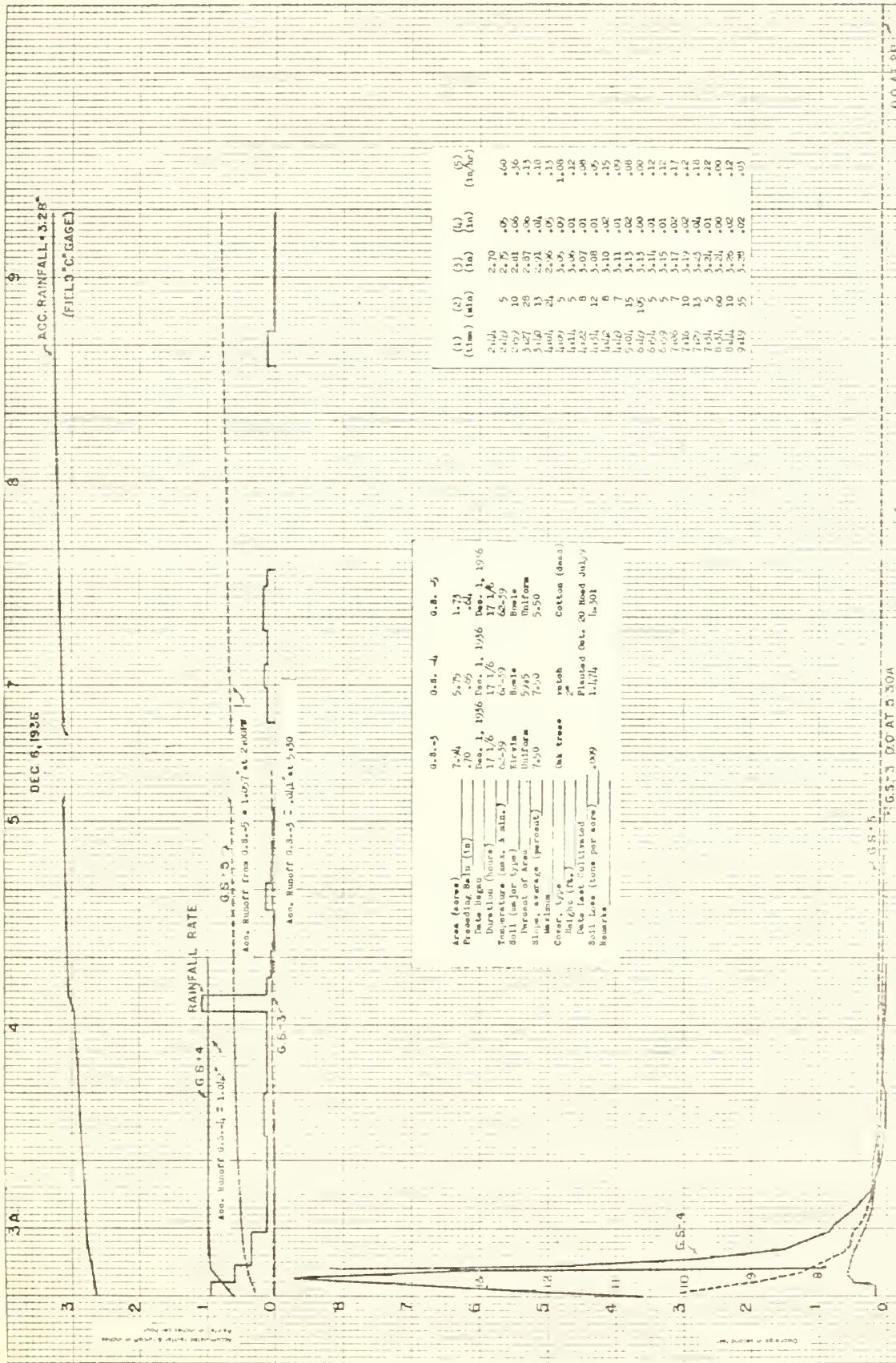


Plotted by  
Checked by  
Sheet 6 of 10

1981

1982





DEC 8, 1936

ACC. RAINFALL - 3.28"  
(FIELD "C" GAGE)

### RAINFALL RATE

35

Ann. Ruff. 0.3.5 = 0.1' at 5.50

$\frac{1}{2}$

Ex. 4

[illegible]

|                           |           |                 |               |
|---------------------------|-----------|-----------------|---------------|
| Area (acres)              | 72.4      | 5.75            | 1.75          |
| Treeing date in (a)       | 1910      | 1906            | 1906          |
| Duration (hours)          | 17 1/2    | 17 1/2          | 17 1/2        |
| Temperature (max. & min.) | 62-39     | 62-59           | 62-59         |
| Soil (color type)         | Eleina    | Bonle           | Bonle         |
| Percent of Area           | Uniform   | 5/65            | Uniform       |
| Slope, average (percent)  | 7-20      | 7-50            | 5-50          |
| Cover, type               | Oak trees | oach            | Cotton (dead) |
| Height (ft.)              |           | 20              |               |
| Date last cultivated      |           | Planted Oct. 20 | Head July 1   |
| Soil Loss (tons per acre) | .099      | 1.17 1/2        | 1.201         |
| Remarks                   |           |                 |               |

| (1)<br>( $t_{\text{lim}}$ ) | (2)<br>( $\omega_{\text{lin}}$ ) | (3)<br>( $t_{\text{in}}$ ) | (4)<br>( $t_{\text{in}}$ ) | (5)<br>( $t_{\text{in}}/t_{\text{lim}}$ ) |
|-----------------------------|----------------------------------|----------------------------|----------------------------|-------------------------------------------|
| 2.144                       | 5                                | 2.70                       | .05                        | .60                                       |
| 2.059                       | 10                               | 2.75                       | .06                        | .56                                       |
| 2.000                       | 20                               | 2.80                       | .06                        | .55                                       |
| 1.950                       | 30                               | 2.85                       | .06                        | .54                                       |
| 1.910                       | 40                               | 2.86                       | .07                        | .53                                       |
| 1.880                       | 50                               | 2.86                       | .07                        | .53                                       |
| 1.850                       | 60                               | 2.86                       | .07                        | .53                                       |
| 1.830                       | 70                               | 2.86                       | .07                        | .53                                       |
| 1.810                       | 80                               | 2.86                       | .07                        | .53                                       |
| 1.790                       | 90                               | 2.86                       | .07                        | .53                                       |
| 1.770                       | 100                              | 2.86                       | .07                        | .53                                       |
| 1.750                       | 110                              | 2.86                       | .07                        | .53                                       |
| 1.730                       | 120                              | 2.86                       | .07                        | .53                                       |
| 1.710                       | 130                              | 2.86                       | .07                        | .53                                       |
| 1.690                       | 140                              | 2.86                       | .07                        | .53                                       |
| 1.670                       | 150                              | 2.86                       | .07                        | .53                                       |
| 1.650                       | 160                              | 2.86                       | .07                        | .53                                       |
| 1.630                       | 170                              | 2.86                       | .07                        | .53                                       |
| 1.610                       | 180                              | 2.86                       | .07                        | .53                                       |
| 1.590                       | 190                              | 2.86                       | .07                        | .53                                       |
| 1.570                       | 200                              | 2.86                       | .07                        | .53                                       |
| 1.550                       | 210                              | 2.86                       | .07                        | .53                                       |
| 1.530                       | 220                              | 2.86                       | .07                        | .53                                       |
| 1.510                       | 230                              | 2.86                       | .07                        | .53                                       |
| 1.490                       | 240                              | 2.86                       | .07                        | .53                                       |
| 1.470                       | 250                              | 2.86                       | .07                        | .53                                       |
| 1.450                       | 260                              | 2.86                       | .07                        | .53                                       |
| 1.430                       | 270                              | 2.86                       | .07                        | .53                                       |
| 1.410                       | 280                              | 2.86                       | .07                        | .53                                       |
| 1.390                       | 290                              | 2.86                       | .07                        | .53                                       |
| 1.370                       | 300                              | 2.86                       | .07                        | .53                                       |
| 1.350                       | 310                              | 2.86                       | .07                        | .53                                       |
| 1.330                       | 320                              | 2.86                       | .07                        | .53                                       |
| 1.310                       | 330                              | 2.86                       | .07                        | .53                                       |
| 1.290                       | 340                              | 2.86                       | .07                        | .53                                       |
| 1.270                       | 350                              | 2.86                       | .07                        | .53                                       |
| 1.250                       | 360                              | 2.86                       | .07                        | .53                                       |
| 1.230                       | 370                              | 2.86                       | .07                        | .53                                       |
| 1.210                       | 380                              | 2.86                       | .07                        | .53                                       |
| 1.190                       | 390                              | 2.86                       | .07                        | .53                                       |
| 1.170                       | 400                              | 2.86                       | .07                        | .53                                       |
| 1.150                       | 410                              | 2.86                       | .07                        | .53                                       |
| 1.130                       | 420                              | 2.86                       | .07                        | .53                                       |
| 1.110                       | 430                              | 2.86                       | .07                        | .53                                       |
| 1.090                       | 440                              | 2.86                       | .07                        | .53                                       |
| 1.070                       | 450                              | 2.86                       | .07                        | .53                                       |
| 1.050                       | 460                              | 2.86                       | .07                        | .53                                       |
| 1.030                       | 470                              | 2.86                       | .07                        | .53                                       |
| 1.010                       | 480                              | 2.86                       | .07                        | .53                                       |
| 0.990                       | 490                              | 2.86                       | .07                        | .53                                       |
| 0.970                       | 500                              | 2.86                       | .07                        | .53                                       |
| 0.950                       | 510                              | 2.86                       | .07                        | .53                                       |
| 0.930                       | 520                              | 2.86                       | .07                        | .53                                       |
| 0.910                       | 530                              | 2.86                       | .07                        | .53                                       |
| 0.890                       | 540                              | 2.86                       | .07                        | .53                                       |
| 0.870                       | 550                              | 2.86                       | .07                        | .53                                       |
| 0.850                       | 560                              | 2.86                       | .07                        | .53                                       |
| 0.830                       | 570                              | 2.86                       | .07                        | .53                                       |
| 0.810                       | 580                              | 2.86                       | .07                        | .53                                       |
| 0.790                       | 590                              | 2.86                       | .07                        | .53                                       |
| 0.770                       | 600                              | 2.86                       | .07                        | .53                                       |
| 0.750                       | 610                              | 2.86                       | .07                        | .53                                       |
| 0.730                       | 620                              | 2.86                       | .07                        | .53                                       |
| 0.710                       | 630                              | 2.86                       | .07                        | .53                                       |
| 0.690                       | 640                              | 2.86                       | .07                        | .53                                       |
| 0.670                       | 650                              | 2.86                       | .07                        | .53                                       |
| 0.650                       | 660                              | 2.86                       | .07                        | .53                                       |
| 0.630                       | 670                              | 2.86                       | .07                        | .53                                       |
| 0.610                       | 680                              | 2.86                       | .07                        | .53                                       |
| 0.590                       | 690                              | 2.86                       | .07                        | .53                                       |
| 0.570                       | 700                              | 2.86                       | .07                        | .53                                       |
| 0.550                       | 710                              | 2.86                       | .07                        | .53                                       |
| 0.530                       | 720                              | 2.86                       | .07                        | .53                                       |
| 0.510                       | 730                              | 2.86                       | .07                        | .53                                       |
| 0.490                       | 740                              | 2.86                       | .07                        | .53                                       |
| 0.470                       | 750                              | 2.86                       | .07                        | .53                                       |
| 0.450                       | 760                              | 2.86                       | .07                        | .53                                       |
| 0.430                       | 770                              | 2.86                       | .07                        | .53                                       |
| 0.410                       | 780                              | 2.86                       | .07                        | .53                                       |
| 0.390                       | 790                              | 2.86                       | .07                        | .53                                       |
| 0.370                       | 800                              | 2.86                       | .07                        | .53                                       |
| 0.350                       | 810                              | 2.86                       | .07                        | .53                                       |
| 0.330                       | 820                              | 2.86                       | .07                        | .53                                       |
| 0.310                       | 830                              | 2.86                       | .07                        | .53                                       |
| 0.290                       | 840                              | 2.86                       | .07                        | .53                                       |
| 0.270                       | 850                              | 2.86                       | .07                        | .53                                       |
| 0.250                       | 860                              | 2.86                       | .07                        | .53                                       |
| 0.230                       | 870                              | 2.86                       | .07                        | .53                                       |
| 0.210                       | 880                              | 2.86                       | .07                        | .53                                       |
| 0.190                       | 890                              | 2.86                       | .07                        | .53                                       |
| 0.170                       | 900                              | 2.86                       | .07                        | .53                                       |
| 0.150                       | 910                              | 2.86                       | .07                        | .53                                       |
| 0.130                       | 920                              | 2.86                       | .07                        | .53                                       |
| 0.110                       | 930                              | 2.86                       | .07                        | .53                                       |
| 0.090                       | 940                              | 2.86                       | .07                        | .53                                       |
| 0.070                       | 950                              | 2.86                       | .07                        | .53                                       |
| 0.050                       | 960                              | 2.86                       | .07                        | .53                                       |
| 0.030                       | 970                              | 2.86                       | .07                        | .53                                       |
| 0.010                       | 980                              | 2.86                       | .07                        | .53                                       |
| 0.000                       | 990                              | 2.86                       | .07                        | .53                                       |
| 0.000                       | 1000                             | 2.86                       | .07                        | .53                                       |

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT, CHIEF  
DIVISION OF RESEARCH, W.C. LONGWILL, CHIEF

Tyler, Teme  
Dec 5 & 6, 1/36  
About 3 of 3 clients

UTWMO. \_\_\_\_\_

Plot by \_\_\_\_\_ date \_\_\_\_\_ obtained by OWM data 5-51-52

computed from by \_\_\_\_\_ date \_\_\_\_\_ checked by XN (date 1-50-54)

WG. 5M. 1956









UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH January, 1937  
 SHEET 1 OF 12 PAGES

 PROJECT SGS Experiment Station, Tyler, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Watershed |        |              | Rainfall                    |     |     |     | Temperature (degree F)       |     |     | Run-off |                              |      |      | Rainfall minus (inches) |                     | Run Loss (cubic feet) |      | Condition of Watershed |      |      |
|-----------|--------|--------------|-----------------------------|-----|-----|-----|------------------------------|-----|-----|---------|------------------------------|------|------|-------------------------|---------------------|-----------------------|------|------------------------|------|------|
| Date      | Number | Area (acres) | (1)                         | (2) | (3) | (4) | (5)                          | (6) | (7) | (8)     | (9)                          | (10) | (11) | (12)                    | (13)                | (14)                  | (15) | (16)                   | (17) | (18) |
|           |        |              | Maximum Intensity           |     |     |     | Amount (inches)              |     |     |         | Duration (minutes)           |      |      |                         | Volume (cubic feet) |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet)  |                       |      |                        |      |      |
|           |        |              | 8 minutes (inches per hour) |     |     |     | 15 minutes (inches per hour) |     |     |         | 30 minutes (inches per hour) |      |      |                         | Total (cubic feet   |                       |      |                        |      |      |





PROJECT—SCS Experiment Station, Tyler, Texas

| Weathered |        | Haystack     |           |                   |                 |                     | Temperature (degrees F.) |         |                    | Humidity        |                |                             |       | Relative Moisture (inches) | Bar. Low (bars per inch) | Condition of Warehouse |       |          |                                 |
|-----------|--------|--------------|-----------|-------------------|-----------------|---------------------|--------------------------|---------|--------------------|-----------------|----------------|-----------------------------|-------|----------------------------|--------------------------|------------------------|-------|----------|---------------------------------|
| Date      | Number | Area (acres) | Temp. No. | Direction (miles) | Amount (inches) | Maximum Temperature |                          | Minimum | Dew Point (inches) | Amount (inches) | Final (inches) | Maximum Rate (Cu. ft. sec.) | Time  |                            |                          |                        |       |          |                                 |
|           | (1)    | (2)          | (3)       | (4)               | (5)             | (6)                 | (7)                      | (8)     | (9)                | (10)            | (11)           | (12)                        | (13)  | (14)                       | (15)                     | (16)                   | (17)  | (18)     | (19)                            |
| 1937      |        |              |           |                   |                 |                     |                          |         |                    |                 |                |                             |       |                            |                          |                        |       |          |                                 |
| Jan. 17   | 3      | 7.94         | 20        | 7:20 AM           | 0.03            | 0.12                | 0.08                     | 0.06    | 41                 | NRO             |                |                             |       |                            |                          |                        |       |          | Fair cover of leaves, soil wet  |
| Jan. 17   | 3      | DO.          | 20        | 10:00AM           | 0.12            | 0.08                | 0.08                     | 0.06    | NRO                |                 |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 17   | 3      | DO.          | 20        | 12:00PM           | 0.04            | 0.12                | 0.08                     | 0.06    | NRO                |                 |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 17   | 3      | DO.          | 20        | 3:00PM            | 0.21            | 0.16                | 0.16                     | 0.16    | NRO                |                 |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 16   | 4      | 5.75         | 10        | 6:52PM            | 0.31            | 2/                  | 0.04                     | 0.04    | 35                 | NRO             |                |                             |       |                            |                          |                        |       |          | Voteh. 2", soil wet, compact    |
| Jan. 16   | 4      | DO.          | 10        | 3:23AM            | 0.02            | 2/                  | 0.04                     | 0.02    | NRO                |                 |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 17   | 4      | DO.          | 10        | 7:52AM            | 0.01            | 2/                  | 0.08                     | 0.04    | 41                 | NRO             |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 17   | 4      | DO.          | 10        | 8:30AM            | 0.03            | 0.12                | 0.08                     | 0.04    | NRO                |                 |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 17   | 4      | DO.          | 10        | 1:12PM            | 0.07            | 0.12                | 0.08                     | 0.04    | NRO                |                 |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 17   | 4      | DO.          | 10        | 3:16PM            | 0.13            | 0.21                | 0.16                     | 0.12    | NRO                |                 |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 16   | 5      | 1.57         | 12        | 7:15AM            | 0.29            | 2/                  | 0.08                     | 0.02    | 35                 | NRO             |                |                             |       |                            |                          |                        |       |          | Octo 4" good stand blwn. cotton |
| Jan. 17   | 5      | DO.          | 12        | 10:00AM           | 0.03            | 0.12                | 0.08                     | 0.06    | 41                 | NRO             |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 17   | 5      | DO.          | 12        | 11:55AM           | 0.04            | 0.12                | 0.08                     | 0.06    | NRO                |                 |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 17   | 5      | DO.          | 12        | 1:16PM            | 0.02            | 0.12                | 0.04                     | 0.02    | NRO                |                 |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 17   | 5      | DO.          | 12        | 3:16PM            | 0.11            | 0.36                | 0.16                     | 0.12    | NRO                |                 |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 19   | 3      | 7.94         | 20        | 4:30PM            | 0.25            | 0.18                | 0.10                     | 0.12    | 39                 | Record Lost     |                |                             |       |                            |                          |                        |       |          | Fair cover of leaves, soil wet  |
| Jan. 20   | 3      | DO.          | 20        | 8:00AM            | 0.20            | 1.14                | 0.96                     | 0.88    | 47                 | DO.             |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 20   | 3      | DO.          | 20        | 4:50PM            | 0.03            | 2/                  | 0.01                     | 0.01    | DO.                |                 |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 21   | 3      | DO.          | 20        | 9:50AM            | 0.58            | 1.20                | 1.12                     | 0.96    | 35                 | DO.             |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 22   | 3      | DO.          | 20        | 11:30PM           | 0.04            | 0.12                | 0.08                     | 0.06    | 22                 | DO.             |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 22   | 3      | DO.          | 20        | 9:10AM            | 0.02            | 2/                  | 0.04                     | 0.04    | DO.                |                 |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 22   | 3      | DO.          | 20        | 10:56AM           | 0.17            | 0.72                | 0.48                     | 0.21    | DO.                |                 |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 22   | 3      | DO.          | 20        | Snow              | 0.20            | -                   | 0                        | -       | 28                 | DO.             |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 24   | 3      | DO.          | 20        | 4:12AM            | 0.22            | 0.21                | 0.20                     | 0.16    | 40                 | DO.             |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 19   | 4      | 5.75         | 10        | 4:20PM            | 2.97            | 0.18                | 0.12                     | 0.16    | 39                 | 5:03P, 5:35P.   | 0.005          | 0.41                        | 5:12  |                            |                          |                        | 2.965 | (lbs)0.5 | Voteh 2", soil saturated, firm  |
| Jan. 19   | 4      | DO.          | 10        | 10:01PM           | 0.20            | 2/                  | 0.02                     | 0.02    | NRO                |                 |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 20   | 4      | DO.          | 10        | 7:10AM            | 1.10            | 1.72                | 1.00                     | 0.90    | 66                 | 10:01A, 3:40P.  |                | 4.60                        | 11:15 |                            |                          |                        |       |          | DO.                             |
| Jan. 20   | 4      | DO.          | 10        | 4:57PM            | 0.05            | 0.12                | 0.08                     | 0.04    | NRO                |                 |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 21   | 4      | DO.          | 10        | 6:44 AM           | 0.02            | 0.12                | 0.04                     | 0.04    | 35                 | NRO             |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 21   | 4      | DO.          | 10        | 9:44 PM           | 0.52            | 2.01                | 1.36                     | 0.84    | 69                 | 10:13A, 12:50P. |                | 9.54                        | 10:47 |                            |                          |                        |       |          | DO.                             |
| Jan. 21   | 4      | DO.          | 10        | 11:30PM           | 0.02            | 0.12                | 0.08                     | 0.04    | NRO                |                 |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 22   | 4      | DO.          | 10        | 9:13AM            | 0.02            | 0.12                | 0.08                     | 0.04    | 22                 | NRO             |                |                             |       |                            |                          |                        |       |          | DO.                             |
| Jan. 22   | 4      | DO.          | 10        | 10:12AM           | 0.33            | 0.61                | 0.52                     | 0.26    | 28                 | 11:07A, 1:15P.  |                | 3.91                        | 11:44 |                            |                          |                        |       |          | DO.                             |
| Jan. 22   | 4      | DO.          | 10        | 4:14AM            | 0.33            | 0.36                | 0.31                     | 0.20    | 40                 | 6:51A, 10:23A.  | 1.030          | 0.10                        | 9:21  |                            |                          |                        | 1.880 |          | DO.                             |
| Jan. 24   | 4      | DO.          | 10        |                   | 2.91            |                     |                          |         |                    |                 |                |                             |       |                            |                          |                        |       | 1.441    |                                 |



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH January & February, 1937  
 SHEET 3 OF 12 SHEETS

 PROJECT 803 Experiment Station, Tyler, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| WATERSHED |        |              | RAINFALL |              |                    |                 | TRANSPIRATION (between P) |                       |                       |         | RUN-OFF |             |                 |                 | Rainfall More Run-off (inches) |       | CONDITION OF WATERSHED |      |      |                                                           |
|-----------|--------|--------------|----------|--------------|--------------------|-----------------|---------------------------|-----------------------|-----------------------|---------|---------|-------------|-----------------|-----------------|--------------------------------|-------|------------------------|------|------|-----------------------------------------------------------|
| Date      | Number | Area (acres) | Gage No. | Begin (hour) | Duration (minutes) | Amount (inches) | MAXIMUM INTERMET          |                       |                       | Maximum | Minimum | Mean (hour) | Weighted (hour) | Amount (inches) | MAXIMUM RATE                   |       |                        |      |      |                                                           |
|           |        |              |          |              |                    |                 | Rate (inches per hour)    | Time (hours per hour) | Time (hours per hour) |         |         |             |                 |                 | Cu ft sec                      | Time  |                        |      |      |                                                           |
| 1937      |        |              |          |              |                    |                 | (1)                       | (2)                   | (3)                   | (4)     | (5)     | (6)         | (7)             | (8)             | (9)                            | (10)  | (11)                   | (12) | (13) | (14)                                                      |
| Jan. 19   | 5      | 1.57         | 12       | 4:36 PM      | 45                 | 0.15            | 0.72                      | 0.36                  | 0.24                  | 49      | 39      | 44.53       | 5.20            |                 | 0.06                           | 4:55  |                        |      |      | Oats 4" good stand blwn cotton stalks, soil natural, firm |
| Jan. 19   | 5      | DO.          | 12       | 10:04 PM     | 60                 | 0.01            | 2/2                       | 2/2                   | 2/2                   | 66      | 47      | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Jan. 20   | 5      | DO.          | 12       | 4:10 AM      | 150                | 0.02            | 1.44                      | 0.96                  | 0.06                  |         |         | 94.53       | 3.10            |                 | 1.05                           | 10:32 |                        |      |      | DO.                                                       |
| Jan. 21   | 5      | DO.          | 12       | 5:19 PM      | 45                 | 0.06            | 0.12                      | 0.08                  | 0.06                  | 69      | 35      | NRO         |                 |                 | 0.93                           | 10:39 |                        |      |      | DO.                                                       |
| Jan. 21   | 5      | DO.          | 12       | 10:32 AM     | 70                 | 0.31            | 1.68                      | 0.68                  | 0.10                  |         |         | 104.30      | 12.10           |                 |                                |       |                        |      |      | DO.                                                       |
| Jan. 21   | 5      | DO.          | 12       | 11:46 PM     | 15                 | 0.02            | 2/2                       | 0.08                  | 0.04                  | 32      | 22      | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Jan. 22   | 5      | DO.          | 12       | 9:17 AM      | 60                 | 0.02            | 2/2                       | 0.02                  | 0.02                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Jan. 22   | 5      | DO.          | 12       | 10:32 AM     | 15                 | 0.01            | 1.56                      | 0.60                  | 0.38                  |         |         | NRO         |                 |                 | 0.82                           | 11:34 |                        |      |      | DO.                                                       |
| Jan. 22   | 5      | DO.          | 12       | 11:07 AM     | 140                | 0.45            | 0.31                      | 0.24                  | 0.18                  | 40      | 28      | 94.20       | 1.10 P.         |                 | 0.06                           | 9:30  |                        |      |      | DO.                                                       |
| Jan. 24   | 5      | DO.          | 12       | 5:00 AM      | 270                | 0.31            | 0.02                      | 0.08                  | 0.08                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Jan. 31   | 3      | 7.94         | 20       | 8:48 PM      | 195                | 0.16            | 0.12                      | 0.08                  | 0.08                  | 47      | 38      | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Jan. 31   | 4      | 5.75         | 10       | 8:41 PM      | 180                | 0.15            | 0.12                      | 0.12                  | 0.12                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Jan. 31   | 5      | 1.57         | 12       | 9:33 PM      | 165                | 0.15            | 0.12                      | 0.12                  | 0.12                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 19   | 3      | 7.94         | 20       | 1:29 AM      | 395                | 0.02            | 0.48                      | 0.44                  | 0.22                  | 73      | 55      | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 19   | 4      | 5.75         | 10       | 1:20 AM      | 372                | 0.01            | 1.32                      | 0.52                  | 0.34                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 19   | 5      | 1.57         | 12       | 1:30 AM      | 365                | 0.00            | 1.32                      | 0.44                  | 0.30                  |         |         | Siltbox     |                 | 0.009           | No Rate                        |       |                        |      |      | DO.                                                       |
| Feb. 20   | 3      | 7.94         | 20       | 10:43 AM     | 15                 | 0.21            | 0.72                      | 0.56                  | 0.28                  | 76      | 61      | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 20   | 4      | 5.75         | 10       | 10:41 AM     | 16                 | 0.14            | 0.72                      | 0.48                  | 0.28                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 20   | 5      | 1.57         | 12       | 10:42 AM     | 15                 | 0.42            | 0.72                      | 0.48                  | 0.24                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 26   | 3      | 7.94         | 20       | 2:51 AM      | 8                  | 0.07            | 0.36                      | 0.20                  | 0.10                  | 33      | 31      | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 26   | 3      | DO.          | 20       | 5:00 AM      | 10                 | 0.03            | 0.12                      | 0.08                  | 0.04                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 26   | 3      | DO.          | 20       | 8:12 AM      | 370                | 0.34            | 0.48                      | 0.36                  | 0.22                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 26   | 3      | DO.          | 20       | 10:32 AM     | 45                 | 0.03            | 0.12                      | 0.04                  | 0.02                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 26   | 3      | DO.          | 20       | 4:05 PM      | 140                | 0.07            | 0.12                      | 0.04                  | 0.02                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 26   | 4      | 5.75         | 10       | 2:51 AM      | 8                  | 0.51            | 0.72                      | 0.32                  | 0.16                  | 33      | 31      | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 26   | 4      | DO.          | 10       | 5:03 AM      | 5                  | 0.08            | 0.12                      | 0.04                  | 0.02                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 26   | 4      | DO.          | 10       | 8:15 AM      | 10                 | 0.01            | 0.12                      | 0.04                  | 0.02                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 26   | 4      | DO.          | 10       | 12:45 PM     | 140                | 0.05            | 0.24                      | 0.08                  | 0.04                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 26   | 4      | DO.          | 10       | 4:03 PM      | 45                 | 0.05            | 0.36                      | 0.12                  | 0.06                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 26   | 5      | 1.57         | 12       | 2:51 AM      | 8                  | 0.06            | 0.48                      | 0.24                  | 0.12                  | 33      | 31      | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 26   | 5      | DO.          | 12       | 4:12 AM      | 30                 | 0.02            | 2/2                       | 0.24                  | 0.12                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 26   | 5      | DO.          | 12       | 8:12 AM      | 345                | 0.38            | 0.36                      | 0.24                  | 0.13                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 26   | 5      | DO.          | 12       | 10:40 AM     | 60                 | 0.02            | 0.12                      | 0.08                  | 0.04                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 26   | 5      | DO.          | 12       | 12:47 PM     | 15                 | 0.02            | 0.12                      | 0.08                  | 0.04                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |
| Feb. 26   | 5      | DO.          | 12       | 4:02 PM      | 10                 | 0.02            | 0.12                      | 0.08                  | 0.04                  |         |         | NRO         |                 |                 |                                |       |                        |      |      | DO.                                                       |

Good cover, soil wet

Vetch 2", soil wet, compact  
Cate 4", good stand blwn. cotton stalks, soil wet, firmGood cover of leaves, soil moist  
Vetch 2", above soil moist, cotton stalks, soil wet, firmGood cover of leaves, soil wet  
Vetch 2", above soil moist, cotton stalks, soil wet, firmGood cover of leaves, soil wet  
Vetch 2", above soil moist, cotton stalks, soil wet, firmGood cover of leaves, soil wet  
Vetch 2", above soil moist, cotton stalks, soil wet, firmGood cover of leaves, soil wet  
Vetch 2", above soil moist, cotton stalks, soil wet, firmGood cover of leaves, soil wet  
Vetch 2", above soil moist, cotton stalks, soil wet, firmGood cover of leaves, soil wet  
Vetch 2", above soil moist, cotton stalks, soil wet, firmGood cover of leaves, soil wet  
Vetch 2", above soil moist, cotton stalks, soil wet, firmGood cover of leaves, soil wet  
Vetch 2", above soil moist, cotton stalks, soil wet, firm





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH Feb. and March, 1937  
 SHEET 4 OF 12

1937

 PROJECT SCS Experiment Station, Tyler, Tex. RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

S. L. BRIDGES, FREDERICKVILLE, 8-1234

| Date    | Watershed |              | Rainfall |             |                    |                 |                             |                              | Temperature (degrees F.)     |                 | Run-off        |               |                 |                  | Mainfall Minor (inches) | Run Loss (tons per acre) | Condition of Watershed                  |      |
|---------|-----------|--------------|----------|-------------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|-----------------|----------------|---------------|-----------------|------------------|-------------------------|--------------------------|-----------------------------------------|------|
|         | Number    | Area (acres) | Obs. No. | Time (hour) | Duration (minutes) | Amount (inches) | Maximum Intensity           |                              |                              | Maximum Minimum | Beacon (hour)  | Fishes (hour) | Amount (inches) | Maximum Rate     |                         |                          |                                         |      |
|         |           |              |          |             |                    |                 | 3 minutes (inches per hour) | 15 minutes (inches per hour) | 30 minutes (inches per hour) |                 |                |               |                 | Cu. ft. per sec. |                         |                          |                                         | Time |
| (1)     | (2)       | (3)          | (4)      | (5)         | (6)                | (7)             | (8)                         | (9)                          | (10)                         | (11)            | (12)           | (13)          | (14)            | (15)             | (16)                    | (17)                     | (18)                                    |      |
| 1937    |           |              |          |             |                    |                 |                             |                              |                              |                 |                |               |                 |                  |                         |                          |                                         |      |
| Feb. 27 | 3         | 7.94         | 20       | 12:50AM     | 105                | 0.06            | 0.12                        | 0.12                         | 0.08                         | 31              | NRO            |               |                 |                  |                         |                          | Good cover of leaves, soil moist        |      |
| Feb. 27 | 3         | 7.94         | 20       | 7:27AM      | 135                | 0.10            | 0.12                        | 0.16                         | 0.08                         |                 | NRO            |               |                 |                  |                         |                          | DO.                                     |      |
| Feb. 27 | 4         | 5.75         | 10       | 9:19PM      | 115                | 0.06            | 2/0.12                      | 2/0.06                       |                              | 31              | NRO            |               |                 |                  |                         |                          | Watch 2" cover, soil moist, firm        |      |
| Feb. 27 | 4         | 5.75         | 10       | 8:27AM      | 150                | 0.09            | 0.24                        | 0.15                         |                              |                 | NRO            |               |                 |                  |                         |                          | DO.                                     |      |
| Feb. 27 | 5         | 1.57         | 12       | 9:22PM      | 315                | 0.09            | 0.12                        | 0.08                         | 0.04                         | 31              | NRO            |               |                 |                  |                         |                          | Cats 4" good stand btwn. cotton         |      |
| Feb. 27 | 5         | 1.57         | 12       | 7:27AM      | 90                 | 0.09            | 0.48                        | 0.08                         |                              |                 | NRO            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 3  | 3         | 7.94         | 20       | 4:46AM      | 90                 | 0.13            | 0.24                        | 0.16                         | 0.10                         | 45              | NRO            |               |                 |                  |                         |                          | Good cover of leaves, soil wet          |      |
| Mar. 3  | 3         | DO.          | 20       | 9:21AM      | 100                | 0.06            | 0.12                        | 0.08                         | 0.04                         |                 | NRO            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 3  | 3         | DO.          | 20       | 12:16PM     | 35                 | 0.04            | 0.24                        | 0.12                         | 0.08                         |                 | NRO            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 3  | 3         | DO.          | 20       | 2:21PM      | 120                | 0.17            | 0.48                        | 0.32                         | 0.20                         |                 | NRO            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 3  | 3         | DO.          | 20       | 8:23PM      | 20                 | 0.03            | 0.24                        | 0.12                         | 0.06                         |                 | NRO            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 4  | 3         | DO.          | 20       | 9:24AM      | 190                | 0.55            | 0.36                        | 0.23                         | 0.16                         | 50              | NRO            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 4  | 3         | DO.          | 20       | 1:16PM      | 50                 | 0.07            | 0.24                        | 0.16                         | 0.12                         |                 | NRO            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 4  | 3         | DO.          | 20       | 4:33PM      | 55                 | 0.05            | 0.12                        | 0.08                         | 0.06                         |                 | NRO            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 4  | 4         | 5.75         | 10       |             | 135                | 1.10            | 0.24                        | 0.20                         | 0.12                         | 45              | Silt Box       |               |                 |                  |                         |                          | Watch 3" cover, soil moist, firm        |      |
| Mar. 4  | 4         | DO.          | 10       | 4:00AM      | 170                | 0.05            | 0.12                        | 0.08                         | 0.04                         |                 | DO.            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 4  | 4         | DO.          | 10       | 8:10AM      | 42                 | 0.05            | 0.24                        | 0.12                         | 0.06                         |                 | DO.            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 4  | 4         | DO.          | 10       | 12:08PM     | 120                | 0.19            | 0.48                        | 0.36                         | 0.22                         |                 | DO.            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 4  | 4         | DO.          | 10       | 8:24PM      | 26                 | 0.05            | 0.24                        | 0.12                         | 0.08                         |                 | DO.            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 4  | 4         | DO.          | 10       | 8:50AM      | 337                | 0.61            | 0.36                        | 0.28                         | 0.26                         | 50              | DO.            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 4  | 4         | DO.          | 10       | 5:15PM      | 30                 | 0.05            | 0.12                        | 0.12                         | 0.10                         |                 | DO.            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 4  | 5         | 1.57         | 12       | 5:11AM      | 90                 | 1.12            | 0.24                        | 0.20                         | 0.12                         | 45              | NRO            |               |                 |                  |                         |                          | Cats 4" good stand btwn. cotton         |      |
| Mar. 4  | 5         | 1.57         | 12       | 8:19AM      | 150                | 0.05            | 0.24                        | 0.20                         | 0.12                         |                 | NRO            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 4  | 5         | 1.57         | 12       | 12:11PM     | 40                 | 0.05            | 0.24                        | 0.12                         | 0.08                         |                 | NRO            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 4  | 5         | 1.57         | 12       | 2:14PM      | 135                | 0.18            | 0.36                        | 0.32                         | 0.20                         |                 | NRO            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 4  | 5         | 1.57         | 12       | 8:23PM      | 25                 | 0.05            | 0.12                        | 0.12                         | 0.10                         |                 | NRO            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 4  | 5         | 1.57         | 12       | 8:44AM      | 240                | 0.59            | 0.36                        | 0.28                         | 0.26                         | 50              | Silt Box       |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 4  | 5         | 1.57         | 12       | 5:14PM      | 45                 | 1.07            | 2/0.08                      | 2/0.08                       | 0.08                         |                 | DO.            |               |                 |                  |                         |                          | DO.                                     |      |
| Mar. 6  | 3         | 7.94         | 20       | 7:10PM      | 235                | 1.00            | 0.48                        | 0.44                         | 0.42                         | 66              | Silt Box       |               |                 |                  |                         |                          | Good cover of leaves, soil wet          |      |
| Mar. 6  | 4         | 5.75         | 10       | 7:06PM      | 450                | 0.97            | 0.96                        | 0.48                         | 0.46                         |                 | 7:11P. 10:36P. |               |                 |                  |                         |                          | Watch 4" complete cover, soil wet       |      |
| Mar. 6  | 5         | 1.57         | 12       | 7:18PM      | 235                | 1.02            | 0.48                        | 0.40                         | 0.34                         |                 | 7:21P. 12:30A. |               |                 |                  |                         |                          | Cats 4" cotton stalks, soil wet, firm   |      |
| Mar. 13 | 3         | 7.94         | 20       | 7:13AM      | 100                | 0.35            | 0.72                        | 0.40                         | 0.24                         | 59              | NRO            |               |                 |                  |                         |                          | Good cover of leaves, soil moist        |      |
| Mar. 13 | 4         | 5.75         | 10       | 7:17AM      | 120                | 0.31            | 0.72                        | 0.36                         | 0.26                         |                 | NRO            |               |                 |                  |                         |                          | Watch 5" complete cover, soil moist     |      |
| Mar. 13 | 5         | 1.57         | 12       | 7:16AM      | 105                | 0.32            | 0.48                        | 0.44                         | 0.30                         |                 | NRO            |               |                 |                  |                         |                          | Cats 4" cotton stalks, soil moist, firm |      |





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH March and April , 19 37  
 SHEET 5 OF 12 PAGES

 PROJECT SCS Experiment Station, Tyler, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date    | WATERGAGE |              | RAINFALL |              |                    |                 |                             | TEMPERATURE (in room F)      |                              |         | HUMIDITY      |                 |                  | HEAVY DRAIN (inches) | Run Loss (tons per acre) | Condition of Watershed |                                     |
|---------|-----------|--------------|----------|--------------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|---------|---------------|-----------------|------------------|----------------------|--------------------------|------------------------|-------------------------------------|
|         | Number    | Area (acres) | Gage No. | Begin (hour) | Duration (minutes) | Amount (inches) | Maximum Intensity           |                              |                              | Minimum | Fogged (hour) | Amount (inches) | Maximum Rate     |                      |                          |                        |                                     |
|         |           |              |          |              |                    |                 | 5 minutes (inches per hour) | 15 minutes (inches per hour) | 30 minutes (inches per hour) |         |               |                 | Cu. ft. per acre |                      |                          |                        | Time                                |
| (1)     | (2)       | (3)          | (4)      | (5)          | (6)                | (7)             | (8)                         | (9)                          | (10)                         | (11)    | (12)          | (13)            | (14)             | (15)                 | (16)                     | (17)                   | (18)                                |
| 1937    |           |              |          |              |                    |                 |                             |                              |                              |         |               |                 |                  |                      |                          |                        |                                     |
| Mar. 13 | 3         | 7,936        | 20       | 3:54 PM      | 30                 | 0.09            | 0.24                        | 0.16                         | 0.08                         | 59      | NRO           |                 |                  |                      |                          |                        | Good cover of leaves, soil moist    |
| Mar. 14 | 3         | DO.          | 20       | 9:51 AM      | 45                 | 0.93            | 0.49                        | 0.40                         | 0.36                         | 41      | NRO           |                 |                  |                      |                          |                        | DO.                                 |
| Mar. 13 | 4         | 5,747        | 10       | 3:52 PM      | 30                 | 0.09            | 0.18                        | 0.32                         | 0.18                         | 59      | NRO           |                 |                  |                      |                          |                        | Veget 5", complete cover, soil wet  |
| Mar. 14 | 4         | 5,747        | 10       | 9:49 AM      | 45                 | 0.91            | 0.48                        | 0.40                         | 0.40                         | 41      | 11:17 A.      | 0.23 P.         | 0.048            | 0.61                 | 11:36                    | 0.632                  | DO.                                 |
| Mar. 13 | 5         | 1,570        | 12       | 3:52 PM      | 25                 | 0.09            | 0.36                        | 0.24                         | 0.18                         | 59      | NRO           |                 |                  |                      |                          |                        | Cats 4", good stand betw. cotton    |
| Mar. 14 | 5         | 1,570        | 12       | 9:51 AM      | 35                 | 0.85            | 0.48                        | 0.40                         | 0.40                         | 41      | 11:11 AM      | 0.04 P.         | 0.106            | 0.15                 | 12:00                    | 0.574                  | DO.                                 |
| Mar. 17 | 3         | 7,936        | 20       | 6:21 PM      | 50                 | 0.13            | 0.12                        | 0.08                         | 0.06                         | 41      | NRO           |                 |                  |                      |                          |                        | Good cover leaves, soil wet         |
| Mar. 17 | 4         | 5,747        | 10       | 6:21 PM      | 65                 | 0.13            | 0.21                        | 0.16                         | 0.14                         | 41      | NRO           |                 |                  |                      |                          |                        | Veget 5", complete cover, soil firm |
| Mar. 17 | 5         | 1,570        | 12       | 6:22 PM      | 65                 | 0.14            | 0.24                        | 0.20                         | 0.16                         | 41      | NRO           |                 |                  |                      |                          |                        | Cats 5", cotton stalks, soil moist  |
| Mar. 19 | 3         | 7,936        | 20       | 3:33 AM      | 15                 | 0.14            | 0.12                        | 0.08                         | 0.08                         | 50      | NRO           |                 |                  |                      |                          |                        | Good cover leaves, soil wet         |
| Mar. 19 | 4         | 5,747        | 10       | 3:33 AM      | 25                 | 0.14            | 0.24                        | 0.20                         | 0.12                         | 50      | NRO           |                 |                  |                      |                          |                        | Veget 5", complete cover, soil firm |
| Mar. 19 | 5         | 1,570        | 12       | 3:33 AM      | 20                 | 0.14            | 0.24                        | 0.20                         | 0.08                         | 50      | NRO           |                 |                  |                      |                          |                        | Cats 5", cotton stalks, soil moist  |
| Mar. 23 | 3         | 7,936        | 20       | 4:10 PM      | 100                | 0.14            | 0.24                        | 0.20                         | 0.12                         | 70      | NRO           |                 |                  |                      |                          |                        | Good cover leaves, soil wet         |
| Mar. 23 | 4         | 5,747        | 10       | 4:10 PM      | 100                | 0.14            | 0.36                        | 0.20                         | 0.12                         | 70      | NRO           |                 |                  |                      |                          |                        | Veget 5", complete cover, soil firm |
| Mar. 23 | 5         | 1,570        | 12       | 4:10 PM      | 100                | 0.14            | 0.36                        | 0.20                         | 0.12                         | 70      | NRO           |                 |                  |                      |                          |                        | Cats 5", cotton stalks, soil moist  |
| Mar. 26 | 3         | 7,936        | 20       | 4:10 PM      | 100                | 0.14            | 0.36                        | 0.20                         | 0.12                         | 70      | NRO           |                 |                  |                      |                          |                        | Good cover leaves, soil wet         |
| Mar. 26 | 4         | 5,747        | 10       | 4:10 PM      | 100                | 0.14            | 0.36                        | 0.20                         | 0.12                         | 70      | NRO           |                 |                  |                      |                          |                        | Veget 5", complete cover, soil firm |
| Mar. 26 | 5         | 1,570        | 12       | 4:10 PM      | 100                | 0.14            | 0.36                        | 0.20                         | 0.12                         | 70      | NRO           |                 |                  |                      |                          |                        | Cats 5", cotton stalks, soil moist  |
| Mar. 29 | 3         | 7,936        | 20       | 4:11 AM      | 135                | 0.05            | 0.04                        | 0.04                         | 0.04                         | 37      | NRO           |                 |                  |                      |                          |                        | Good cover leaves, soil wet         |
| Mar. 29 | 3         | DO.          | 20       | 4:11 AM      | 145                | 0.06            | 0.04                        | 0.04                         | 0.04                         | 37      | NRO           |                 |                  |                      |                          |                        | DO.                                 |
| Mar. 29 | 3         | DO.          | 20       | 4:11 AM      | 210                | 0.19            | 0.04                        | 0.04                         | 0.04                         | 37      | NRO           |                 |                  |                      |                          |                        | DO.                                 |
| Mar. 29 | 4         | 5,747        | 10       | 8:10 PM      | 170                | 0.10            | 0.12                        | 0.08                         | 0.06                         | 39      | NRO           |                 |                  |                      |                          |                        | Veget 10-12", complete cover, soil  |
| Mar. 29 | 4         | 5,747        | 10       | 2:10 PM      | 40                 | 0.02            | 0.12                        | 0.04                         | 0.04                         | 39      | NRO           |                 |                  |                      |                          |                        | DO.                                 |
| Mar. 29 | 4         | 5,747        | 10       | 4:15 PM      | 270                | 0.21            | 0.08                        | 0.08                         | 0.04                         | 39      | NRO           |                 |                  |                      |                          |                        | DO.                                 |
| Mar. 29 | 5         | 1,570        | 12       | 9:08 AM      | 150                | 0.05            | 0.04                        | 0.04                         | 0.04                         | 39      | NRO           |                 |                  |                      |                          |                        | Good stand betw. cotton             |
| Mar. 29 | 5         | 1,570        | 12       | 2:17 PM      | 210                | 0.10            | 0.04                        | 0.04                         | 0.04                         | 39      | NRO           |                 |                  |                      |                          |                        | Cats 6", stalks, soil wet, firm     |
| Mar. 29 | 5         | 1,570        | 12       | 9:12 PM      | 120                | 0.05            | 0.04                        | 0.04                         | 0.04                         | 39      | NRO           |                 |                  |                      |                          |                        | Cats 7", DO.                        |
| Mar. 29 | 5         | 1,570        | 12       | 9:12 PM      | 120                | 0.20            | 0.04                        | 0.04                         | 0.04                         | 39      | NRO           |                 |                  |                      |                          |                        | DO.                                 |
| Apr. 3  | 3         | 7,936        | 20       | 3:38 PM      | 160                | 0.08            | 1.68                        | 0.96                         | 0.96                         | 54      | Silt Box      | 0.001           | No Data          |                      |                          |                        | Pair cover leaves, soil moist       |
| Apr. 3  | 4         | 5,747        | 10       | 3:38 PM      | 155                | 0.85            | 1.68                        | 1.56                         | 1.08                         | 54      | 5:17 P.       | 0.107           | 2.24             | 5:29                 | 0.743                    | 0.054                  | Veget 10-14", complete cover, soil  |
| Apr. 3  | 5         | 1,570        | 12       | 3:47 PM      | 150                | 0.93            | 2.16                        | 1.36                         | 1.00                         | 54      | 5:15 P.       | 0.162           | 0.56             | 5:24                 | 0.668                    | 0.199                  | Cats 7", good stand betw. cotton    |



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 Month April & May, 19 37  
 Sheet 6 of 12 SHEETS

 PROJECT SC3 Experiment Station, Tyler, Texas RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

U. S. GOVERNMENT PRINTING OFFICE: 8-1128

| Date    | Watershed |              | Rainfall |              |                    |                 |                             |                              | Transmissivity (Section F)   |         |              | Runoff          |                 |              | Rainfall Moisture (inches) | Rise Low (feet per acre) | Condition of Watershed                |      |
|---------|-----------|--------------|----------|--------------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|---------|--------------|-----------------|-----------------|--------------|----------------------------|--------------------------|---------------------------------------|------|
|         | Number    | Area (acres) | Gage No. | Begin (hour) | Duration (minutes) | Amount (inches) | Maximum Intensity           |                              |                              | Minimum | Begin (hour) | Rise Low (feet) | Amount (inches) | Maximum Rate |                            |                          |                                       |      |
|         |           |              |          |              |                    |                 | 5 minutes (inches per hour) | 15 minutes (inches per hour) | 30 minutes (inches per hour) |         |              |                 |                 | CU ft. sec.  |                            |                          |                                       | Time |
| 1937    | (1)       | (2)          | (3)      | (4)          | (5)                | (6)             | (7)                         | (8)                          | (9)                          | (10)    | (11)         | (12)            | (13)            | (14)         | (15)                       | (16)                     | (17)                                  |      |
| Apr. 4  | 3         | 7.936        | 20       | 3:10 PM      | 95                 | 0.14            | 0.14                        | 0.14                         | 0.24                         | 0.15    | 62           | NRO             | 54              |              |                            |                          | Good cover of leaves, soil wet        |      |
| Apr. 4  | 3         | DO.          | 20       | 4:10 PM      | 10                 | 0.05            | 0.05                        | 0.24                         | 0.16                         | 0.08    |              | NRO             |                 |              |                            |                          | DO.                                   |      |
| Apr. 4  | 4         | 5.747        | 10       | 2:31 PM      | 125                | 0.17            | 0.17                        | 0.72                         | 0.32                         | 0.13    | 62           | NRO             | 54              |              |                            |                          | Veget 10-12" dense cover, soil        |      |
| Apr. 4  | 5         | 1.57         | 12       | 3:15 PM      | 105                | 0.17            | 0.17                        | 0.72                         | 0.28                         | 0.14    |              | NRO             |                 |              |                            |                          | On 7" stalks, soil wet, firm          |      |
| Apr. 7  | 3         | 7.936        | 20       | 5:00 PM      | 15                 | 0.15            | 0.15                        | 1.44                         | 0.50                         | 0.30    | 73           | NRO             | 46              |              |                            |                          | Good cover leaves, soil wet           |      |
| Apr. 7  | 4         | 5.747        | 10       | 7:50 PM      | 10                 | 0.10            | 0.10                        | 0.72                         | 0.42                         | 0.20    |              | NRO             |                 |              |                            |                          | Veget 10-12" dense cover, soil        |      |
| Apr. 7  | 5         | 1.570        | 12       | 8:00 PM      | 8                  | 0.06            | 0.06                        | 0.72                         | 0.32                         | 0.15    |              | NRO             |                 |              |                            |                          | On 7" stalks, soil moist, firm        |      |
| Apr. 13 | 3         | 7.936        | 20       | 2:10 PM      | 20                 | 0.07            | 0.07                        | 0.24                         | 0.20                         | 0.14    | 78           | NRO             | 59              |              |                            |                          | Pair cover leaves, soil moist         |      |
| Apr. 13 | 4         | 5.747        | 10       | 3:11 PM      | 20                 | 0.05            | 0.05                        | 0.24                         | 0.15                         | 0.13    |              | NRO             |                 |              |                            |                          | Veget 1-10" dense cover, soil         |      |
| Apr. 13 | 5         | 1.570        | 12       | 3:11 PM      | 15                 | 0.06            | 0.06                        | 0.36                         | 0.24                         | 0.12    |              | NRO             |                 |              |                            |                          | On 7" stalks, soil moist, firm        |      |
| Apr. 19 | 3         | 7.936        | 20       | 4:10 PM      | 10                 | 0.05            | 0.05                        | 0.12                         | 0.09                         | 0.09    | 80           | NRO             | 64              |              |                            |                          | Pair cover leaves, soil moist         |      |
| Apr. 19 | 4         | 5.747        | 10       | 2:10 PM      | 60                 | 0.06            | 0.06                        | 0.24                         | 0.15                         | 0.13    |              | NRO             |                 |              |                            |                          | Veget 1-10" dense cover, soil         |      |
| Apr. 19 | 5         | 1.570        | 12       | 2:10 PM      | 55                 | 0.08            | 0.08                        | 0.24                         | 0.16                         | 0.14    |              | NRO             |                 |              |                            |                          | On 7" stalks, soil moist, firm        |      |
| Apr. 20 | 3         | 7.936        | 20       | 4:10 PM      | 10                 | 0.05            | 0.05                        | 0.12                         | 0.09                         | 0.09    | 81           | NRO             | 67              | 0.002        | No Data                    |                          | Pair cover leaves, soil moist         |      |
| Apr. 20 | 4         | 5.747        | 10       | 3:11 PM      | 10                 | 0.05            | 0.05                        | 0.24                         | 0.15                         | 0.13    |              | NRO             |                 | 0.131        | 4.011                      | 1.011                    | Veget 1-10" dense cover, soil         |      |
| Apr. 20 | 5         | 1.570        | 12       | 3:11 PM      | 7                  | 0.03            | 0.03                        | 0.36                         | 0.24                         | 0.12    |              | NRO             |                 | 0.353        | 2.043                      | 1.043                    | On 7" stalks, soil moist, firm        |      |
| Apr. 23 | 3         | 7.936        | 20       | 4:10 PM      | 10                 | 0.05            | 0.05                        | 0.12                         | 0.09                         | 0.09    | 82           | NRO             | 64              |              |                            |                          | Pair cover leaves, soil moist         |      |
| Apr. 23 | 4         | 5.747        | 10       | 3:11 PM      | 8                  | 0.03            | 0.03                        | 0.12                         | 0.09                         | 0.09    |              | NRO             |                 | 0.009        | No Data                    |                          | Veget 1-10" dense cover, soil         |      |
| Apr. 23 | 5         | 1.570        | 12       | 3:11 PM      | 7                  | 0.03            | 0.03                        | 0.36                         | 0.24                         | 0.12    |              | NRO             |                 | 0.009        | No Data                    |                          | On 7" stalks, soil moist, firm        |      |
| May 1   | 3         | 7.936        | 20       | 12:00 PM     | 10                 | 0.08            | 0.08                        | 0.12                         | 0.09                         | 0.09    | 71           | NRO             | 59              |              |                            |                          | Pair cover leaves, soil moist         |      |
| May 1   | 4         | 5.747        | 10       | 1:10 PM      | 10                 | 0.03            | 0.03                        | 0.12                         | 0.09                         | 0.09    |              | NRO             |                 |              |                            |                          | Area reduced & soil moist             |      |
| May 1   | 5         | 1.570        | 12       | 1:10 PM      | 10                 | 0.06            | 0.06                        | 0.12                         | 0.09                         | 0.09    |              | NRO             |                 |              |                            |                          | On 15-20" stalks, soil moist, firm    |      |
| May 3   | 3         | 7.936        | 20       | 6:12 PM      | 35                 | 0.12            | 0.12                        | 0.24                         | 0.24                         | 0.16    | 76           | NRO             | 57              |              |                            |                          | Pair cover leaves, soil moist         |      |
| May 3   | 4         | 5.747        | 10       | 6:20 PM      | 35                 | 0.12            | 0.12                        | 0.24                         | 0.24                         | 0.20    |              | NRO             |                 |              |                            |                          | Area reduced & soil moist             |      |
| May 3   | 5         | 1.570        | 12       | 6:20 PM      | 40                 | 0.13            | 0.13                        | 0.36                         | 0.24                         | 0.22    |              | NRO             |                 |              |                            |                          | On 15-20" stalks, soil moist, firm    |      |
| May 8   | 3         | 7.936        | 20       | 8:10 PM      | 5                  | 0.12            | 0.12                        | 1.44                         | 0.48                         | 0.24    | 64           | NRO             | 61              |              |                            |                          | Pair cover leaves, soil moist         |      |
| May 8   | 4         | 5.747        | 10       | 8:20 PM      | 5                  | 0.12            | 0.12                        | 1.44                         | 0.48                         | 0.24    |              | NRO             |                 |              |                            |                          | Area reduced & soil moist             |      |
| May 8   | 5         | 1.570        | 12       | 8:20 PM      | 5                  | 0.06            | 0.06                        | 0.72                         | 0.24                         | 0.12    |              | NRO             |                 |              |                            |                          | On 15-20" stalks, soil moist, firm    |      |
| May 10  | 3         | 7.936        | 20       | 7:15 PM      | 5                  | 0.02            | 0.02                        | 0.24                         | 0.08                         | 0.04    | 86           | NRO             | 66              |              |                            |                          | Pair cover of leaves, dry, soil moist |      |
| May 10  | 3         | 7.936        | 20       | 9:50 PM      | 35                 | 0.13            | 0.13                        | 0.24                         | 0.24                         | 0.20    |              | NRO             |                 |              |                            |                          | DO.                                   |      |
| May 10  | 4         | 5.747        | 10       | 7:10 PM      | 5                  | 0.03            | 0.03                        | 0.36                         | 0.12                         | 0.06    | 86           | NRO             | 66              |              |                            |                          | Area reduced & soil moist, loose      |      |
| May 10  | 4         | 5.747        | 10       | 10:00 PM     | 40                 | 0.12            | 0.12                        | 0.36                         | 0.24                         | 0.18    |              | NRO             |                 |              |                            |                          | DO.                                   |      |
| May 10  | 5         | 1.570        | 12       | 7:10 PM      | 20                 | 0.16            | 0.16                        | 0.36                         | 0.16                         | 0.10    | 86           | NRO             | 66              |              |                            |                          | On 30" stalks, soil moist, firm       |      |
| May 10  | 5         | 1.570        | 12       | 10:10 PM     | 45                 | 0.12            | 0.12                        | 0.36                         | 0.20                         | 0.16    |              | NRO             |                 |              |                            |                          | DO.                                   |      |





MONTH May and June, 1937  
SHEET 7 OF 12 SHEETS

| Date    | Weathered |              |         | Rainfall           |                 |                             |                              |                              | Temperature (degrees F.) |         | Humidity       |                 |                     |      | Rainfall minus Evaporation (inches) | Bar. Low (feet per sec) | Condition of Weathered |                                               |
|---------|-----------|--------------|---------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|--------------------------|---------|----------------|-----------------|---------------------|------|-------------------------------------|-------------------------|------------------------|-----------------------------------------------|
|         | Number    | Area (acres) | Inches  | Duration (minutes) | Amount (inches) | Maximum Intensity           |                              |                              | Minimum                  | Maximum | Fogged (hours) | Amount (inches) | Maximum Humidity    |      |                                     |                         |                        |                                               |
|         |           |              |         |                    |                 | 5 minutes (inches per hour) | 15 minutes (inches per hour) | 30 minutes (inches per hour) |                          |         |                |                 | Cu. ft. per sq. ft. | Time |                                     |                         |                        |                                               |
| 1937    | (1)       | (2)          | (3)     | (4)                | (5)             | (6)                         | (7)                          | (8)                          | (9)                      | (10)    | (11)           | (12)            | (13)                | (14) | (15)                                | (16)                    | (17)                   | (18)                                          |
| May 13  | 3         | 7.936        | 1.59AM  | 105                | 0.07            | 2/                          | 0.04                         | 0.04                         | 0.04                     | 79      | 64             | NRO             |                     |      |                                     |                         |                        | Fair cover of large, soil moist               |
| May 13  | 4         | 5.747        | 1.16AM  | 120                | 0.07            | 7.12                        | 0.03                         | 0.03                         | 0.03                     |         |                | NRO             |                     |      |                                     |                         |                        | Cotton planted 1 1/2 to moisture,             |
| May 13  | 5         | 1.57         | 1.55AM  | 120                | 0.09            | 0.12                        | 0.08                         | 0.06                         | 0.06                     |         |                | NRO             |                     |      |                                     |                         |                        | Cotton good stand, soil moist, firm           |
| May 22  | 3         | 7.936        | 6.39AM  | 60                 | 0.33            | 0.60                        | 0.32                         | 0.24                         | 0.24                     | 86      | 64             | NRO             |                     |      |                                     |                         |                        | Fair cover leaves, 1 1/2 to moisture          |
| May 22  | 4         | 5.747        | 6.37AM  | 57                 | 0.29            | 0.72                        | 0.43                         | 0.36                         | 0.36                     |         |                | NRO             |                     |      |                                     |                         |                        | Cotton not up, 2" to moist, soil loose        |
| May 22  | 5         | 1.57         | 6.34AM  | 60                 | 0.29            | 0.72                        | 0.43                         | 0.36                         | 0.36                     |         |                | NRO             |                     |      |                                     |                         |                        | Cat stubble 6", soil moist, firm.             |
| June 3  | 3         | 7.936        | 7.55AM  | 35                 | 0.05            | 0.24                        | 0.12                         | 0.03                         | 0.03                     | 84      | 69             | NRO             |                     |      |                                     |                         |                        | Fair cover leaves, 3" to moisture.            |
| June 3  | 4         | 5.747        | 7.53AM  | 45                 | 0.06            | 0.24                        | 0.16                         | 0.10                         | 0.10                     |         |                | NRO             |                     |      |                                     |                         |                        | Cotton sparse, 3" to moisture, soil loose     |
| June 3  | 5         | 1.570        | 7.54AM  | 55                 | 0.07            | 0.24                        | 0.16                         | 0.10                         | 0.10                     |         |                | NRO             |                     |      |                                     |                         |                        | Cat stubble, 6", soil dry, firm.              |
| June 4  | 3         | 7.936        | 7.30AM  | 75                 | 0.15            | 0.48                        | 0.20                         | 0.12                         | 0.12                     | 72      | 66             | NRO             |                     |      |                                     |                         |                        | Fair cover leaves, top soil dry, moist        |
| June 4  | 3         | Do.          | 9.59AM  | 150                | 0.28            | 0.36                        | 0.24                         | 0.20                         | 0.20                     |         |                | NRO             |                     |      |                                     |                         |                        | Do.                                           |
| June 4  | 3         | Do.          | 2.47PM  | 3                  | 0.02            | 0.24                        | 0.08                         | 0.04                         | 0.04                     |         |                | NRO             |                     |      |                                     |                         |                        | Do.                                           |
| June 4  | 4         | 5.747        | 7.12AM  | 75                 | 0.45            | 0.36                        | 0.20                         | 0.16                         | 0.16                     | 72      | 66             | NRO             |                     |      |                                     |                         |                        | Cotton sparse, soil loose.                    |
| June 4  | 4         | Do.          | 9.52AM  | 155                | 0.28            | 0.24                        | 0.24                         | 0.20                         | 0.20                     |         |                | NRO             |                     |      |                                     |                         |                        | Do.                                           |
| June 4  | 5         | 1.570        | 7.44AM  | 60                 | 0.12            | 0.36                        | 0.16                         | 0.12                         | 0.12                     | 72      | 66             | NRO             |                     |      |                                     |                         |                        | 3" to moisture                                |
| June 4  | 5         | Do.          | 10.03AM | 145                | 0.26            | 0.24                        | 0.24                         | 0.20                         | 0.20                     |         |                | NRO             |                     |      |                                     |                         |                        | Cat stubble, 6", soil dry, firm.              |
| June 4  | 5         | Do.          | 2.10PM  | 5                  | 0.02            | 0.24                        | 0.08                         | 0.04                         | 0.04                     |         |                | NRO             |                     |      |                                     |                         |                        | Do.                                           |
| June 6  | 3         | 7.936        | 12.10AM | 60                 | 0.40            | 1.92                        | 1.28                         | 0.76                         | 0.76                     | 75      | 63             | Nit box         |                     |      |                                     |                         |                        | Cat stubble, 6", soil moist, firm.            |
| June 6  | 3         | Do.          | 8.12AM  | 220                | 0.89            | 2.16                        | 1.76                         | 1.08                         | 1.08                     |         |                | Do.             |                     |      |                                     |                         |                        | Do.                                           |
| June 7  | 3         | Do.          | 2.40AM  | 40                 | 0.09            | 0.12                        | 0.08                         | 0.08                         | 0.08                     | 83      | 66             | Do.             |                     |      |                                     |                         |                        | Do.                                           |
| June 7  | 3         | Do.          | 1.55PM  | 25                 | 0.35            | 1.68                        | 0.98                         | 0.60                         | 0.60                     |         |                | Do.             |                     |      |                                     |                         |                        | Do.                                           |
| June 6  | 4         | 5.747        | 1.29AM  | 65                 | 0.80            | 1.92                        | 1.32                         | 0.80                         | 0.80                     | 75      | 63             | 2.21A. 2.45A.   |                     |      |                                     |                         |                        | 2.178                                         |
| June 6  | 4         | Do.          | 8.11AM  | 285                | 0.94            | 3.00                        | 2.40                         | 1.34                         | 1.34                     |         |                | 2.21A. 2.45A.   |                     |      |                                     |                         |                        | None                                          |
| June 7  | 4         | Do.          | 2.40AM  | 165                | 0.07            | 0.12                        | 0.09                         | 0.02                         | 0.02                     | 83      | 66             | NRO             |                     |      |                                     |                         |                        | Do.                                           |
| June 7  | 4         | Do.          | 6.50AM  | 30                 | 0.01            | 2/                          | 2/                           | 0.02                         | 0.02                     |         |                | NRO             |                     |      |                                     |                         |                        | Do.                                           |
| June 7  | 4         | Do.          | 1.15AM  | 78                 | 0.40            | 2.40                        | 1.32                         | 0.82                         | 0.82                     |         |                | 2.10P. 2.42P.   |                     |      |                                     |                         |                        | Do.                                           |
| June 6  | 5         |              |         |                    | 2.22            |                             |                              |                              |                          |         |                | 0.336           |                     |      |                                     |                         |                        | Do.                                           |
| June 6  | 5         | 1.570        | 12.40AM | 115                | 0.82            | 2.16                        | 0.76                         | 0.60                         | 0.60                     | 75      | 63             | NRO             |                     |      |                                     |                         |                        | Cat stubble 6", soil moist, firm.             |
| June 6  | 5         | Do.          | 8.19AM  | 210                | 0.96            | 5/                          | 5/                           | 0.96                         | 0.96                     |         |                | 8.12SA. 9.10SA. |                     |      |                                     |                         |                        | Do.                                           |
| June 7  | 5         | Do.          | 2.53AM  | 60                 | 0.06            | 2/                          | 0.08                         | 0.06                         | 0.06                     | 83      | 66             | NRO             |                     |      |                                     |                         |                        | Do.                                           |
| June 7  | 5         | Do.          | 1.43PM  | 30                 | 0.63            | 3.12                        | 2.30                         | 1.26                         | 1.26                     |         |                | 2.10P. 2.17P.   |                     |      |                                     |                         |                        | Do.                                           |
| June 16 | 3         | 7.936        | 1.44AM  | 80                 | 0.32            | 0.96                        | 0.60                         | 0.48                         | 0.48                     | 85      | 67             | NRO             |                     |      |                                     |                         |                        | Good cover, soil moist                        |
| June 16 | 3         | Do.          | 5.23AM  | 80                 | 0.16            | 0.36                        | 0.32                         | 0.16                         | 0.16                     |         |                | NRO             |                     |      |                                     |                         |                        | Do.                                           |
| June 16 | 4         | 5.747        | 1.02AM  | 75                 | 0.29            | 1.68                        | 1.08                         | 0.54                         | 0.54                     | 85      | 67             | NRO             |                     |      |                                     |                         |                        | Cotton 2-4", fair stand, soil moist           |
| June 16 | 4         | Do.          | 5.22AM  | 85                 | 0.16            | 0.60                        | 0.40                         | 0.26                         | 0.26                     |         |                | NRO             |                     |      |                                     |                         |                        | Do.                                           |
| June 16 | 5         | 1.570        | 1.15AM  | 5/                 | 0.36            | -                           | -                            | -                            | -                        | 85      | 67             | NRO             |                     |      |                                     |                         |                        | Cat stubble 6", good stand, soil moist, firm. |



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 PROJECT: SCS Experiment Station, Tyler, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS  
 MONTH: June, July, August, 1937  
 SHEET 8 OF 12

| WATERSHED |        |                 | RAINFALL |                 |                       |                    |                                |                                 | TEMPERATURE<br>(degrees F)      |         |     |                  | RUN OFF        |                    |              |      | Rainfall Microns<br>(inches) | Run Loss<br>(acre per acre) | Condition of Watershed |                                                                                                             |
|-----------|--------|-----------------|----------|-----------------|-----------------------|--------------------|--------------------------------|---------------------------------|---------------------------------|---------|-----|------------------|----------------|--------------------|--------------|------|------------------------------|-----------------------------|------------------------|-------------------------------------------------------------------------------------------------------------|
| Date      | Number | Area<br>(acres) | Obs. No. | Days<br>(hours) | Duration<br>(minutes) | Amount<br>(inches) | MAXIMUM INTENSITY              |                                 |                                 | Minimum |     | Begin<br>(hours) | End<br>(hours) | Amount<br>(inches) | Cu. ft. sec. | Time |                              |                             |                        |                                                                                                             |
| (1)       | (2)    | (3)             | (4)      | (5)             | (6)                   | (7)                | 5 minutes<br>(inches per hour) | 15 minutes<br>(inches per hour) | 30 minutes<br>(inches per hour) | (8)     | (9) | (10)             | (11)           | (12)               | (13)         | (14) | (15)                         | (16)                        | (17)                   | (18)                                                                                                        |
| June 18   | 3      | 7.74            | 20       | 54.11PM         | 20                    | 0.25               | 1.20                           | 0.80                            | 0.50                            | 93      | 73  | NRO              |                |                    |              |      |                              |                             |                        | Good cover, soil moist,<br>Cotton 4-6", fair moist, loose,<br>Cat stubble 6", good and soil<br>moist, firm. |
| June 18   | 4      | 5.747           | 10       | 54.13PM         | 18                    | 0.27               | 1.20                           | 0.96                            | 0.54                            | 93      | 73  | NRO              |                |                    |              |      |                              |                             |                        | Oaks in full leaf, soil dry.                                                                                |
| June 18   | 5      | 1.570           | 12       | 54.24PM         | 30                    | 0.09               | 0.36                           | 0.44                            | 0.18                            | 93      | 73  | NRO              |                |                    |              |      |                              |                             |                        | Cotton 6-11", soil loose, dry.                                                                              |
| July 7    | 3      | 7.936           | 20       | 44.12PM         | 220                   | 1.07               | 1.68                           | 1.60                            | 1.36                            | 97      | 67  | NRO              |                |                    |              |      |                              |                             |                        | Baro. soft fallow, soil loose, dry.                                                                         |
| July 7    | 4      | 5.747           | 10       | 44.10PM         | 245                   | 1.20               | 2.40                           | 1.96                            | 1.54                            | 97      | 67  | NRO              |                |                    |              |      |                              |                             |                        | Oaks in full leaf, soil moist.                                                                              |
| July 7    | 5      | 1.570           | 12       | 44.33PM         | 260                   | 1.21               | 2.40                           | 1.84                            | 1.54                            | 97      | 67  | NRO              |                |                    |              |      |                              |                             |                        | Cotton 6-11", fair stand, soil<br>moist, loose.                                                             |
| July 9    | 3      | 7.936           | 20       | 12.14.6PM       | 15                    | 0.06               | 0.24                           | 0.24                            | 0.12                            | 85      | 70  | NRO              |                |                    |              |      |                              |                             |                        | Baro. soft fallow, soil loose, moist                                                                        |
| July 9    | 3      | 7.936           | 20       | 5.01PM          | 20                    | 0.02               | -                              | 0.04                            | -                               | 85      | 70  | NRO              |                |                    |              |      |                              |                             |                        | DO.                                                                                                         |
| July 9    | 4      | 5.747           | 10       | 12.15.0PM       | 10                    | 0.08               | 0.60                           | 0.32                            | 0.16                            | 85      | 70  | NRO              |                |                    |              |      |                              |                             |                        | Cotton 6-11", fair stand, soil<br>moist, loose.                                                             |
| July 9    | 4      | 5.747           | 10       | 5.00PM          | 25                    | 0.02               | -                              | 0.04                            | 0.04                            | 85      | 70  | NRO              |                |                    |              |      |                              |                             |                        | DO.                                                                                                         |
| July 9    | 5      | 1.570           | 12       | 12.12.2PM       | 40                    | 0.08               | 0.48                           | 0.20                            | 0.14                            | 85      | 70  | NRO              |                |                    |              |      |                              |                             |                        | Baro. soft fallow, soil loose, moist                                                                        |
| July 9    | 5      | 1.570           | 12       | 5.14PM          | 30                    | 0.02               | -                              | 0.04                            | 0.04                            | 85      | 70  | NRO              |                |                    |              |      |                              |                             |                        | DO.                                                                                                         |
| July 10   | 3      | 7.936           | 20       | 12.12.1PM       | 20                    | 0.10               | -                              | 0.04                            | -                               | 79      | 69  | NRO              |                |                    |              |      |                              |                             |                        | Oaks in full leaf, soil moist                                                                               |
| July 10   | 3      | 7.936           | 20       | 4.12PM          | 75                    | 0.05               | -                              | 0.04                            | -                               | 79      | 69  | NRO              |                |                    |              |      |                              |                             |                        | DO.                                                                                                         |
| July 10   | 3      | 7.936           | 20       | 5.12PM          | 10                    | 0.02               | -                              | 0.04                            | 0.04                            | 79      | 69  | NRO              |                |                    |              |      |                              |                             |                        | DO.                                                                                                         |
| July 10   | 3      | 7.936           | 20       | 11.12.4PM       | 1.05                  | 0.04               | 0.35                           | 0.14                            | 0.04                            | 79      | 69  | NRO              |                |                    |              |      |                              |                             |                        | DO.                                                                                                         |
| July 10   | 4      | 5.747           | 10       | 12.12.1PM       | 10                    | 0.04               | -                              | 0.04                            | -                               | 79      | 69  | NRO              |                |                    |              |      |                              |                             |                        | Cotton 6-11", soil loose, moist.                                                                            |
| July 10   | 4      | 5.747           | 10       | 12.12.1PM       | 10                    | 0.04               | -                              | 0.04                            | -                               | 79      | 69  | NRO              |                |                    |              |      |                              |                             |                        | DO.                                                                                                         |
| July 10   | 4      | 5.747           | 10       | 12.12.1PM       | 10                    | 0.04               | -                              | 0.04                            | -                               | 79      | 69  | NRO              |                |                    |              |      |                              |                             |                        | DO.                                                                                                         |
| July 10   | 5      | 1.570           | 12       | 4.12PM          | 60                    | 0.02               | -                              | -                               | 0.04                            | 79      | 69  | NRO              |                |                    |              |      |                              |                             |                        | Cotton 6-11", soil loose, moist.                                                                            |
| July 10   | 5      | 1.570           | 12       | 4.12PM          | 30                    | 0.04               | -                              | 0.04                            | 0.04                            | 79      | 69  | NRO              |                |                    |              |      |                              |                             |                        | DO.                                                                                                         |
| July 10   | 5      | 1.570           | 12       | 11.30.4PM       | 165                   | 0.56               | 1.32                           | 0.52                            | 0.32                            | 79      | 69  | NRO              |                |                    |              |      |                              |                             |                        | DO.                                                                                                         |
| July 20   | 3      | 7.936           | 20       | 12.12.1PM       | 20                    | 0.61               | 2.08                           | 2.14                            | 1.30                            | 91      | 74  | NRO              |                |                    |              |      |                              |                             |                        | Baro. soft fallow, soil loose, moist                                                                        |
| July 20   | 4      | 5.747           | 10       | 12.12.1PM       | 10                    | 0.62               | 3.72                           | 2.20                            | 1.24                            | 91      | 74  | NRO              |                |                    |              |      |                              |                             |                        | DO.                                                                                                         |
| July 20   | 5      | 1.570           | 12       | 12.12.1PM       | 18                    | 0.65               | 3.72                           | 2.10                            | 1.30                            | 91      | 74  | NRO              |                |                    |              |      |                              |                             |                        | Oaks in full leaf, soil moist                                                                               |
| July 22   | 3      | 7.936           | 20       | 5.20PM          | 5                     | 0.02               | 0.24                           | 0.08                            | 0.04                            | 91      | 73  | NRO              |                |                    |              |      |                              |                             |                        | Cotton 10-24", soil moist                                                                                   |
| July 22   | 4      | 5.747           | 10       | 11.17PM         | 5                     | 0.02               | 0.24                           | 0.08                            | 0.04                            | 91      | 73  | NRO              |                |                    |              |      |                              |                             |                        | Baro. soil loose, moist                                                                                     |
| July 22   | 5      | 1.570           | 12       | 5.20PM          | 5                     | 0.02               | -                              | -                               | -                               | 91      | 73  | NRO              |                |                    |              |      |                              |                             |                        | Baro. soft fallow, soil loose, moist                                                                        |
| Aug. 5    | 3      | 7.936           | 20       | 12.12.1PM       | 20                    | 0.04               | 0.24                           | 0.12                            | 0.08                            | 97      | 74  | NRO              |                |                    |              |      |                              |                             |                        | Oaks in full leaf, soil dry                                                                                 |
| Aug. 5    | 4      | 5.747           | 10       | 12.12.1PM       | 12                    | 0.02               | 0.12                           | 0.08                            | 0.04                            | 97      | 74  | NRO              |                |                    |              |      |                              |                             |                        | Cotton 13-23", soil dry                                                                                     |
| Aug. 5    | 5      | 1.570           | 12       | 12.12.1PM       | -                     | TR.                | -                              | -                               | -                               | 97      | 74  | NRO              |                |                    |              |      |                              |                             |                        | Baro. soft fallow, soil dry                                                                                 |
| Aug. 13   | 3      | 7.936           | 20       | 8.19AM          | 105                   | 0.50               | 1.44                           | 1.23                            | 0.68                            | 97      | 75  | NRO              |                |                    |              |      |                              |                             |                        | Oaks in full leaf, soil dry                                                                                 |
| Aug. 13   | 3      | 7.936           | 20       | 9.15AM          | 5                     | 0.01               | 0.12                           | 0.04                            | 0.02                            | 97      | 75  | NRO              |                |                    |              |      |                              |                             |                        | DO.                                                                                                         |





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH August, Sept. Oct. 1937  
 SHEET 9 OF 12 SHEETS

 PROJECT SCS Experiment Station, Tyler, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date     | Watershed |              |          | Rainfall     |                    |                 |                             |                              | Temperature (degree F.)      |         |         | Run-off         |             |                  |              |       | Rainfall minus Run-off (inches) | Soil Loss (tons per acre)                                                                                                                          | CONDITION OF WATERSHED |
|----------|-----------|--------------|----------|--------------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|---------|---------|-----------------|-------------|------------------|--------------|-------|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
|          | Number    | Area (acres) | Obs. No. | Begin (hour) | Duration (minutes) | Amount (inches) | MAXIMUM INTENSITY           |                              |                              | Maximum | Minimum | Begin (hour)    | Ends (hour) | Amount (cu. ft.) | MAXIMUM RATE |       |                                 |                                                                                                                                                    |                        |
|          |           |              |          |              |                    |                 | 3 minutes (inches per hour) | 15 minutes (inches per hour) | 30 minutes (inches per hour) |         |         |                 |             |                  | Cu ft. sec.  | Time  |                                 |                                                                                                                                                    |                        |
| (1)      | (2)       | (3)          | (4)      | (5)          | (6)                | (7)             | (8)                         | (9)                          | (10)                         | (11)    | (12)    | (13)            | (14)        | (15)             | (16)         | (17)  | (18)                            | (19)                                                                                                                                               |                        |
| Aug. 13  | 4         | 5,747        | 10       | 8:19AM       | 20                 | 0.26            | 1.80                        | 1.00                         | 0.52                         | 97      | 75      | NRO             |             |                  |              |       |                                 | Cotton 18-30", soil dry.                                                                                                                           |                        |
| Aug. 13  | 4         | DO.          | 10       | 9:47AM       | 20                 | 0.53            | 1.44                        | 1.04                         | 0.54                         | 97      | 75      | NRO             |             |                  |              |       |                                 | DO.                                                                                                                                                |                        |
| Aug. 13  | 5         | 1,570        | 12       | 8:21AM       | 15                 | 0.07            | 0.44                        | 0.28                         | 0.14                         | 97      | 75      | NRO             |             |                  |              |       |                                 | Baro, soft fallow, soil dry.                                                                                                                       |                        |
| Aug. 13  | 5         | DO.          | 12       | 9:43AM       | 45                 | 0.20            | 0.96                        | 0.48                         | 0.26                         | 97      | 75      | NRO             |             |                  |              |       |                                 | DO.                                                                                                                                                |                        |
| Aug. 19  | 3         | 7,936        | 20       | 4:30PM       | 5                  | 0.02            | 0.24                        | 0.08                         | 0.04                         | 94      | 70      | NRO             |             |                  |              |       |                                 | Oaks in full leaf, soil dry.                                                                                                                       |                        |
| Aug. 19  | 4         | 5,747        | 10       | 4:00PM       | 5                  | 0.01            | 0.12                        | 0.04                         | 0.02                         | 94      | 70      | NRO             |             |                  |              |       |                                 | Cotton 24-30", soil dry.                                                                                                                           |                        |
| Aug. 19  | 5         | 1,570        | 12       | 4:00 PM      | -                  | Tr.             | -                           | -                            | -                            | -       | -       | NRO             |             |                  |              |       |                                 | Baro, soft fallow, soil dry.                                                                                                                       |                        |
| Aug. 22  | 3         | 7,936        | 20       | 3:29PM       | 100                | 1.50            | 2.88                        | 2.40                         | 1.32                         | 95      | 73      | 3:54P. 4:07P.   |             | 0.002            |              | 1.498 | 0.006                           | Oaks in full leaf, soil dry.                                                                                                                       |                        |
| Aug. 22  | 4         | 5,747        | 10       | 2:11PM       | 160                | 1.36            | 3.84                        | 2.48                         | 2.12                         | 95      | 73      | 3:50P. 4:30P.   |             | 0.220            |              | 1.110 | 1.257                           | Cotton 24-30", soil dry.                                                                                                                           |                        |
| Aug. 22  | 5         | 1,570        | 12       | 3:03PM       | 170                | 1.05            | 3.00                        | 1.44                         | 1.22                         | 95      | 73      | NRO             |             | -                |              | -     | -                               | Baro, soft fallow, soil dry.                                                                                                                       |                        |
| Aug. 30  | 3         | 7,936        | 20       | 10:29PM      | 200                | 0.99            | 2.16                        | 1.36                         | 1.28                         | 90      | 71      | NRO             |             |                  |              | 0.817 | 0.114                           | Oaks in full leaf, soil dry.                                                                                                                       |                        |
| Aug. 30  | 4         | 5,747        | 10       | 10:27PM      | 210                | 0.90            | 1.68                        | 1.28                         | 1.24                         | 90      | 71      | 10:52P. 11:50P. |             | 0.083            |              |       |                                 | Cotton 24-30", soil moist.                                                                                                                         |                        |
| Aug. 30  | 5         | 1,570        | 12       | 10:24PM      | 200                | 0.87            | 1.80                        | 1.32                         | 1.14                         | 90      | 71      | NRO             |             |                  |              |       |                                 | Baro, soft fallow, soil moist.                                                                                                                     |                        |
| Sept. 1  | 3         | 7,936        | 20       | 1:04PM       | 15                 | 0.13            | 0.72                        | 0.52                         | 0.26                         | 88      | 72      | NRO             |             |                  |              |       |                                 | Oaks in full leaf, soil moist.                                                                                                                     |                        |
| Sept. 1  | 4         | 5,747        | 10       | 1:02PM       | 10                 | 0.11            | 0.84                        | 0.44                         | 0.22                         | 88      | 72      | NRO             |             |                  |              |       |                                 | Cotton 24-30", soil moist.                                                                                                                         |                        |
| Sept. 1  | 5         | 1,570        | 12       | 1:07PM       | 30                 | 0.02            | -                           | 0.04                         | 0.01                         | 88      | 72      | NRO             |             |                  |              |       |                                 | Baro, soft fallow, soil moist.                                                                                                                     |                        |
| Sept. 2  | 3         | 7,936        | 20       | 1:23PM       | 30                 | 0.04            | 1.44                        | 1.28                         | 0.96                         | 86      | 68      | 1:49P. 2:43P.   |             | 0.001            |              | 0.639 | none                            | Oaks in full leaf, soil moist.                                                                                                                     |                        |
| Sept. 2  | 4         | 5,747        | 10       | 1:15PM       | 43                 | 0.70            | 2.40                        | 1.48                         | 1.18                         | 86      | 68      | 1:35P. 3:30P.   |             | 0.226            |              | 0.474 | 0.427                           | Cotton 24-30", soil moist.                                                                                                                         |                        |
| Sept. 2  | 5         | 1,570        | 12       | 1:19PM       | 40                 | 0.39            | 1.82                        | 0.88                         | 0.50                         | 86      | 68      | NRO             |             | -                |              | -     | -                               | Baro, soft fallow, soil moist.                                                                                                                     |                        |
| Sept. 5  | 3         | 7,936        | 20       | 12:26PM      | 15                 | 0.04            | 0.24                        | 0.16                         | 0.08                         | 89      | 72      | NRO             |             |                  |              |       |                                 | Oaks in full leaf, soil moist.                                                                                                                     |                        |
| Sept. 5  | 4         | 5,747        | 10       | 12:20PM      | 15                 | 0.04            | 0.24                        | 0.16                         | 0.08                         | 89      | 72      | NRO             |             |                  |              |       |                                 | Cotton 24-30", soil moist.                                                                                                                         |                        |
| Sept. 5  | 5         | 1,570        | 12       | 12:00PM      | -                  | Tr.             | -                           | -                            | -                            | 89      | 72      | -               |             |                  |              |       |                                 | Baro, soft fallow, soil moist.                                                                                                                     |                        |
| Sept. 25 | 3         | 7,936        | 20       | 7:26AM       | 80                 | 0.38            | 1.20                        | 0.96                         | 0.72                         | 73      | 63      | NRO             |             |                  |              |       |                                 | Oaks in full leaf, soil dry.                                                                                                                       |                        |
| Sept. 25 | 4         | 5,747        | 10       | 7:25AM       | 85                 | 0.35            | 1.20                        | 0.84                         | 0.46                         | 73      | 63      | NRO             |             |                  |              |       |                                 | Cotton 24-30", soil dry.                                                                                                                           |                        |
| Sept. 25 | 5         | 1,570        | 12       | 7:24AM       | 95                 | 0.31            | 0.96                        | 0.64                         | 0.48                         | 73      | 63      | NRO             |             |                  |              |       |                                 | Oats emerging on control strip.                                                                                                                    |                        |
| Oct. 9   | 3         | 7,936        | 20       | 5:15AM       | 180                | 0.15            | 0.12                        | 0.08                         | 0.08                         | 65      | 57      | NRO             |             |                  |              |       |                                 | Oaks in full leaf, soil dry.                                                                                                                       |                        |
| Oct. 9   | 4         | 5,747        | 10       | 5:16AM       | 200                | 0.16            | 0.74                        | 0.16                         | 0.10                         | 55      | 57      | NRO             |             |                  |              |       |                                 | Cotton 24-30", soil moist.                                                                                                                         |                        |
| Oct. 9   | 5         | 1,570        | 12       | 5:06AM       | 200                | 0.18            | 0.12                        | 0.12                         | 0.10                         | 65      | 57      | NRO             |             |                  |              |       |                                 | Oats 2" on control strips.                                                                                                                         |                        |
| Oct. 13  | 3         | 7,936        | 20       | 2:25AM       | 660                | 0.75            | 0.12                        | 0.08                         | 0.08                         | 58      | 55      | NRO             |             |                  |              |       |                                 | Oaks in full leaf, soil dry.                                                                                                                       |                        |
| Oct. 13  | 3         | 7,936        | 20       | 5:00PM       | 45                 | 0.04            | 0.12                        | 0.08                         | 0.10                         | 55      | 55      | NRO             |             |                  |              |       |                                 | DO.                                                                                                                                                |                        |
| Oct. 13  | 3         | 7,936        | 20       | 4:00AM       | 80                 | 0.05            | 2/                          | 0.08                         | 0.06                         | 58      | 55      | NRO             |             |                  |              |       |                                 | DO.                                                                                                                                                |                        |
| Oct. 13  | 4         | 5,747        | 10       | 1:56AM       | 660                | 0.71            | 0.24                        | 0.16                         | 0.14                         | 58      | 55      | NRO             |             |                  |              |       |                                 | Cotton 24-30" Oats drilled betw rows, soil dry, 100% full betw. Cotton 24-30", on same strip full betw. Cotton 24-30", soil moist, 100% full betw. |                        |
| Oct. 13  | 4         | DO.          | 10       | 1:30PM       | 60                 | 0.02            | 2/                          | 0.04                         | 0.02                         | 58      | 55      | NRO             |             |                  |              |       |                                 | Cotton 24-30", soil moist, 100% full betw.                                                                                                         |                        |
| Oct. 13  | 4         | DO.          | 10       | 5:00PM       | 235                | 0.08            | 2/                          | 0.04                         | 0.04                         | 58      | 55      | NRO             |             |                  |              |       |                                 | Cotton 24-30", soil moist, 100% full betw.                                                                                                         |                        |





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH Oct. and November, 1937

 SHEET 10 OF 12 SHEETS

 PROJECT EC8 Experiment Station, Tyler, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

R. S. WATERSHEDS, JULY 3, 1936

| Date    | WATERSHED |              |         | RAINFALL     |                    |                 |                          | TEMPERATURE (F)           |                           | RURRY   |         |             |            | Mainfall Minia (inches) | Run Load (tons per acre) | Condition of Watershed |
|---------|-----------|--------------|---------|--------------|--------------------|-----------------|--------------------------|---------------------------|---------------------------|---------|---------|-------------|------------|-------------------------|--------------------------|------------------------|
|         | Number    | Area (acres) | Age No. | Hours (hour) | Duration (minutes) | Amount (inches) | 8 min. (inches per hour) | 16 min. (inches per hour) | 30 min. (inches per hour) | Maximum | Minimum | Hour (hour) | End (hour) | Amount (inches)         | Ch. ft. sec              | Time                   |
| Oct. 13 | 5         | 1.570        | 12      | 2:30AM       | 690                | 0.70            | 0.19                     | 0.28                      | 0.14                      | 58      | 55      | NRO         | (11)       | (17)                    | (18)                     | (19)                   |
| Oct. 13 | 5         | 1.570        | 12      | 3:30AM       | 125                | 0.06            | 0.06                     | 0.06                      | 0.06                      | 58      | 55      | NRO         |            |                         |                          |                        |
| Oct. 14 | 4         | 5.747        | 10      | 3:30AM       | 105                | 0.76            | 2/2                      | 0.04                      | 0.02                      | 63      | 52      | NRO         |            |                         |                          |                        |
| Oct. 14 | 5         | 1.570        | 12      | 3:20AM       | 90                 | 0.02            | 2/2                      | 0.02                      | 0.02                      | 63      | 52      | NRO         |            |                         |                          |                        |
| Oct. 16 | 3         | 7.936        | 20      | 4:53PM       | 30                 | 0.04            | 0.12                     | 0.08                      | 0.08                      | 70      | 43      | NRO         |            |                         |                          |                        |
| Oct. 16 | 4         | 5.747        | 10      | 4:53PM       | 125                | 0.07            | 0.24                     | 0.12                      | 0.08                      | 70      | 43      | NRO         |            |                         |                          |                        |
| Oct. 16 | 5         | 1.570        | 12      | 5:00PM       | 125                | 0.06            | 0.12                     | 0.08                      | 0.06                      | 70      | 43      | NRO         |            |                         |                          |                        |
| Oct. 17 | 3         | 7.947        | 20      | 2:21AM       | 315                | 0.86            | 1.20                     | 0.64                      | 0.52                      | 65      | 62      | NRO         |            |                         |                          |                        |
| Oct. 17 | 3         | 7.947        | 20      | 1:15AM       | 120                | 0.14            | 0.12                     | 0.12                      | 0.08                      | 65      | 62      | NRO         |            |                         |                          |                        |
| Oct. 17 | 4         | 5.747        | 10      | 1:21AM       | 70                 | 0.07            | 0.60                     | 0.34                      | 0.12                      | 65      | 62      | NRO         |            |                         |                          |                        |
| Oct. 17 | 4         | DO.          | 10      | 3:37AM       | 245                | 0.82            | 0.96                     | 0.56                      | 0.56                      | 65      | 62      | NRO         |            |                         |                          |                        |
| Oct. 17 | 4         | DO.          | 10      | 10:12AM      | 135                | 1.00            | 0.12                     | 0.08                      | 0.08                      | 65      | 62      | NRO         |            |                         |                          |                        |
| Oct. 17 | 5         | 1.570        | 12      | 1:23AM       | 70                 | 0.05            | 0.36                     | 0.16                      | 0.08                      | 65      | 62      | NRO         |            |                         |                          |                        |
| Oct. 17 | 5         | DO.          | 12      | 3:11AM       | 240                | 0.89            | 1.14                     | 1.04                      | 0.76                      | 65      | 62      | NRO         |            |                         |                          |                        |
| Oct. 17 | 5         | DO.          | 12      | 11:21AM      | 85                 | 1.00            | 0.12                     | 0.08                      | 0.08                      | 65      | 62      | NRO         |            |                         |                          |                        |
| Nov. 5  | 3         | 7.936        | 20      | 4:15AM       | 80                 | 0.19            | 0.48                     | 0.24                      | 0.18                      | 73      | 57      | NRO         |            |                         |                          |                        |
| Nov. 5  | 4         | 5.747        | 10      | 3:55AM       | 75                 | 0.20            | 0.48                     | 0.28                      | 0.24                      | 73      | 57      | NRO         |            |                         |                          |                        |
| Nov. 5  | 5         | 1.570        | 12      | 4:05AM       | 80                 | 0.21            | 0.40                     | 0.20                      | 0.22                      | 73      | 57      | NRO         |            |                         |                          |                        |
| Nov. 8  | 3         | 7.936        | 20      | 11:55AM      | 740                | 0.68            | 0.48                     | 0.24                      | 0.16                      | 70      | 61      | NRO         |            |                         |                          |                        |
| Nov. 8  | 3         | DO.          | 20      | 1:55AM       | 470                | 2.19            | 0.72                     | 0.64                      | 0.56                      | 60      | 61      | NRO         |            |                         |                          |                        |
| Nov. 8  | 3         | DO.          | 20      | 12:15PM      | 150                | 0.10            | 0.21                     | 0.16                      | 0.10                      | 60      | 61      | NRO         |            |                         |                          |                        |
| Nov. 8  | 4         | 5.747        | 10      | 11:16AM      | 690                | 0.68            | 0.60                     | 0.40                      | 0.30                      | 70      | 61      | NRO         |            |                         |                          |                        |
| Nov. 8  | 4         | DO.          | 10      | 1:50AM       | 1030               | 2.20            | 1.80                     | 0.96                      | 0.78                      | 68      | 61      | 5:01A.      | 7:58A.     | 0.114                   | 1.79                     | 6:20                   |
| Nov. 8  | 4         | DO.          | 10      | 1:15PM       | 60                 | 0.01            | 2/2                      | 2/2                       | 2/2                       | 57      | 55      | NRO         |            |                         |                          |                        |
| Nov. 8  | 5         | 1.570        | 12      | 12:00PM      | 605                | 2.99            | 0.72                     | 0.44                      | 0.38                      | 70      | 61      | NRO         |            |                         |                          |                        |
| Nov. 8  | 5         | DO.          | 12      | 1:51AM       | 770                | 2.27            | 0.60                     | 0.44                      | 0.38                      | 68      | 61      | Shift Box   |            |                         |                          |                        |
| Nov. 15 | 3         | 7.936        | 20      | 12:01PM      | 70                 | 1.32            | 3.60                     | 1.92                      | 1.36                      | 71      | 54      | 12:02P.     | 1:55P.     | 0.019                   | No Run                   |                        |
| Nov. 15 | 3         | 7.936        | 20      | 7:35PM       | 30                 | 0.30            | 1.20                     | 0.68                      | 0.56                      | 71      | 54      | 12:02P.     | 1:55P.     | 0.019                   | 1/1                      |                        |
| Nov. 15 | 4         | 5.747        | 10      | 12:03PM      | 75                 | 1.20            | 5.10                     | 3.96                      | 2.44                      | 71      | 54      | 12:02P.     | 1:04P.     | 0.044                   | 12.15                    | 12:37                  |
| Nov. 15 | 4         | 5.747        | 10      | 7:05PM       | 40                 | 0.37            | 1.20                     | 1.12                      | 0.68                      | 71      | 54      | 7:48P.      | 8:52P.     | 0.044                   | 26.39                    | 12:48                  |
| Nov. 15 | 5         | 7.936        | 20      | 12:01PM      | 5/30               | 1.63            | 1.20                     | 1.12                      | 0.68                      | 71      | 54      | 12:21P.     | 1:22P.     | 1.121                   | 3.91                     | 7:56                   |
| Nov. 15 | 5         | 7.936        | 20      | 7:35PM       |                    | 1.63            | 1.20                     | 1.12                      | 0.68                      | 71      | 54      | 7:48P.      | 8:52P.     | 0.381                   | 2.90                     | 12:31                  |
| Nov. 15 | 5         | 7.936        | 20      | 7:35PM       |                    | 1.63            | 1.20                     | 1.12                      | 0.68                      | 71      | 54      | 7:48P.      | 8:52P.     | 0.381                   | 2.37                     | 7:55                   |

Bare, soft fallow, soil dry, loose

DO

Cotton 2 1/2-30", oats drilled betw.

Cotton 1 1/2-30", soil moist, loose, 2-3"

Vetch 1 1/2-30", soil moist, loose, 2-3"

Fair cover leaves, soil moist

Cotton 2 1/2-30", soil moist, loose, 2-3"

Vetch not up, soil moist, loose, 2-3"

Fair cover leaves, soil moist

Fair cover leaves, soil moist

Cotton 2 1/2-30", soil moist, loose

DO

DO

Vetch not up, 2-3" moist, loose, oats

DO

DO

Fair cover of leaves, topsoil dry

Cotton stalks oats 2" fair, moist

Vetch 2" fair, moist, loose, 2-3"

Oats 1 1/2-30", soil moist, loose

Fair cover of leaves, topsoil dry

DO

DO

Cotton stalks Oats 2" fair, loose

DO

DO

Vetch 2" fair, loose, 2-3"

DO

DO

Fair cover of leaves, soil wet

DO

Cotton stalks, 2nd Oats 2" fair,

DO

Vetch 2" fair, soil moist, firm,

DO

Vetch 2" fair, soil moist, firm,

DO

Vetch 2" fair, soil moist, firm,

DO

Vetch 2" fair, soil moist, firm,

DO



MONTH Nov. and December, 1937

SHEET 11 OF 12 SHEETS

Project\_\_ SCS Experiment Station, Tyler, Texas

# RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| WINDSPEED |        |              | RAINFALL |                 |                    |                 |                             | TEMPERATURES (degrees F.)    |                              |         | HUMIDITY |                 |                  | MOISTURE RATE   |                    |      | HUMIDITY MINOR (hours) |      | SILK LOSS (loss per acre) |         | CONDITION OF WEATHER |                                      |
|-----------|--------|--------------|----------|-----------------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|---------|----------|-----------------|------------------|-----------------|--------------------|------|------------------------|------|---------------------------|---------|----------------------|--------------------------------------|
| Date      | Number | Area (acres) | Temp No. | Descent (hours) | Duration (minutes) | Amount (inches) | Maximum Intensity           |                              |                              | Maximum | Minimum  | Descent (hours) | Relative (hours) | Amount (inches) | Cubic ft. per acre |      | Hours                  | Loss | Condition                 | Weather |                      |                                      |
|           |        |              |          |                 |                    |                 | 8 minutes (inches per hour) | 16 minutes (inches per hour) | 30 minutes (inches per hour) |         |          |                 |                  |                 | Per ft. sec        | Time |                        |      |                           |         |                      |                                      |
| 1937      |        |              |          |                 |                    |                 |                             |                              |                              |         |          |                 |                  |                 |                    |      |                        |      |                           |         |                      |                                      |
| Nov. 18   | 3      | 7.936        | 20       | 3.12 PM         | 60                 | 0.09            | 0.24                        | 0.16                         | 0.10                         | 43      | 33       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Fair cover of leaves, soil wet.      |
| Nov. 18   | 4      | 5.717        | 10       | 2.00 PM         | 75                 | 0.08            | 0.24                        | 0.12                         | 0.10                         | 43      | 33       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Cotton stalks, 2nd yr, with leaves.  |
| Nov. 18   | 5      | 1.570        | 12       | 2.50 PM         | 65                 | 0.07            | 0.24                        | 0.12                         | 0.10                         | 43      | 33       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Vetch 2nd fair, 2nd yr, with leaves. |
| Nov. 22   | 3      | 7.936        | 20       | 2.30 PM         | 100                | 0.20            | 0.24                        | 0.12                         | 0.10                         | 35      | 29       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Firm, 2nd fair, 2nd yr, with leaves. |
| Nov. 22   | 4      | 5.717        | 10       | 3.23 PM         | 75                 | 0.22            | 0.24                        | 0.12                         | 0.10                         | 35      | 29       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Firm, 2nd fair, 2nd yr, with leaves. |
| Nov. 22   | 5      | 1.570        | 12       | 3.23 PM         | 105                | 0.19            | 0.24                        | 0.12                         | 0.10                         | 35      | 29       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Firm, 2nd fair, 2nd yr, with leaves. |
| Dec. 1    | 3      | 7.936        | 20       | 10.25 AM        | 100                | 0.07            | 0.12                        | 0.12                         | 0.08                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Fair cover of leaves, soil wet.      |
| Dec. 1    | 3      | 7.936        | 20       | 11.25 AM        | 110                | 0.06            | 0.12                        | 0.08                         | 0.04                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 1    | 4      | 5.717        | 10       | 10.15 AM        | 90                 | 0.07            | 0.12                        | 0.12                         | 0.10                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Cotton dormant, soil moist, open.    |
| Dec. 1    | 4      | DO.          | 10       | 11.15 PM        | 105                | 0.06            | 2/                          | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 1    | 5      | 1.570        | 12       | 10.15 AM        | 105                | 0.07            | 0.12                        | 0.08                         | 0.08                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Vetch 2nd fair, 2nd yr, with leaves. |
| Dec. 1    | 5      | 1.570        | 12       | 11.25 AM        | 120                | 0.06            | 2/                          | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 3    | 3      | 7.936        | 20       | 11.25 AM        | 105                | 0.07            | 0.12                        | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Fair cover of leaves, soil moist.    |
| Dec. 3    | 4      | 5.717        | 10       | 11.25 AM        | 120                | 0.06            | 2/                          | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Cotton dormant, soil moist, open.    |
| Dec. 3    | 5      | 1.570        | 12       | 11.25 AM        | 120                | 0.06            | 2/                          | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 6    | 3      | 7.936        | 20       | 11.25 AM        | 105                | 0.07            | 0.12                        | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Vetch 2nd fair, 2nd yr, with leaves. |
| Dec. 6    | 4      | 5.717        | 10       | 11.25 AM        | 120                | 0.06            | 2/                          | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 6    | 5      | 1.570        | 12       | 11.25 AM        | 120                | 0.06            | 2/                          | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 8    | 3      | 7.936        | 20       | 11.25 AM        | 105                | 0.07            | 0.12                        | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Fair cover of leaves, soil moist.    |
| Dec. 8    | 4      | 5.717        | 10       | 11.25 AM        | 120                | 0.06            | 2/                          | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Cotton dormant, soil moist, open.    |
| Dec. 8    | 5      | 1.570        | 12       | 11.25 AM        | 120                | 0.06            | 2/                          | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 10   | 3      | 7.936        | 20       | 11.25 AM        | 105                | 0.07            | 0.12                        | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Vetch 2nd fair, 2nd yr, with leaves. |
| Dec. 10   | 4      | 5.717        | 10       | 11.25 AM        | 120                | 0.06            | 2/                          | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 10   | 5      | 1.570        | 12       | 11.25 AM        | 120                | 0.06            | 2/                          | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 12   | 3      | 7.936        | 20       | 11.25 AM        | 105                | 0.07            | 0.12                        | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Fair cover of leaves, soil moist.    |
| Dec. 12   | 4      | 5.717        | 10       | 11.25 AM        | 120                | 0.06            | 2/                          | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Cotton dormant, soil moist, open.    |
| Dec. 12   | 5      | 1.570        | 12       | 11.25 AM        | 120                | 0.06            | 2/                          | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 14   | 3      | 7.936        | 20       | 11.25 AM        | 105                | 0.07            | 0.12                        | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Vetch 2nd fair, 2nd yr, with leaves. |
| Dec. 14   | 4      | 5.717        | 10       | 11.25 AM        | 120                | 0.06            | 2/                          | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 14   | 5      | 1.570        | 12       | 11.25 AM        | 120                | 0.06            | 2/                          | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 16   | 3      | 7.936        | 20       | 11.25 AM        | 105                | 0.07            | 0.12                        | 0.08                         | 0.06                         | 43      | 25       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Fair cover of leaves, soil moist.    |
| Dec. 16   | 3      | 7.936        | 20       | 11.25 AM        | 115                | 1.27            | 1.23                        | 0.60                         | 1.10                         | 57      | 47       | Silt Box        |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 16   | 3      | 7.936        | 20       | 11.25 AM        | 115                | 2.55            | 1.52                        | 1.00                         | 1.10                         | 57      | 47       | DO.             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 16   | 4      | 5.717        | 10       | 2.12 AM         | 765                | 1.23            | 0.6                         | 0.52                         | 1.36                         | 57      | 47       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Fair cover leaves, soil moist.       |
| Dec. 16   | 4      | 5.717        | 10       | 11.25 PM        | 427                | 2.53            | 2.76                        | 1.72                         | 1.08                         | 57      | 47       | 6.25 PM         | 12.55 AM         | 0.002           |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 15   | 5      | 1.570        | 12       | 11.25 AM        | 30                 | 0.02            | 2/                          | 0.04                         | 0.01                         | 57      | 47       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 15   | 5      | 1.570        | 12       | 11.25 AM        | 765                | 1.20            | 0.72                        | 0.48                         | 0.36                         | 57      | 47       | 11.55 AM        | 2.12 PM          | 0.272           |                    |      |                        |      |                           |         |                      | Cotton dormant, soil moist, firm.    |
| Dec. 15   | 5      | 1.570        | 12       | 11.25 PM        | 455                | 1.20            | 0.48                        | 0.40                         | 0.34                         | 57      | 47       | 4.00 PM         | 7.00 AM          | 0.272           |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 16   | 5      | 1.570        | 12       | 11.25 PM        | 455                | 2.50            | 0.48                        | 0.40                         | 0.34                         | 57      | 47       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 21   | 3      | 7.936        | 20       | 10.30 PM        | 110                | 0.10            | 0.24                        | 0.12                         | 0.08                         | 52      | 39       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | Fair cover leaves, soil saturated.   |
| Dec. 22   | 3      | 7.936        | 20       | 2.30 AM         | 30                 | 0.02            | 2/                          | 0.04                         | 0.04                         | 51      | 43       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 22   | 3      | 7.936        | 20       | 11.15 AM        | 795                | 1.32            | 0.24                        | 0.20                         | 0.20                         | 51      | 43       | HRD             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 22   | 3      | 7.936        | 20       | 11.15 PM        | 90                 | 0.10            | 0.12                        | 0.12                         | 0.12                         | 51      | 43       | Silt Box        |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 26   | 3      | 7.936        | 20       | 11.35 AM        | 90                 | 0.08            | 2/                          | 0.08                         | 0.06                         | 61      | 52       | DO.             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 27   | 3      | 7.936        | 20       | 2.21 PM         | 80                 | 0.09            | 2/                          | 0.08                         | 0.06                         | 69      | 59       | DO.             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 28   | 3      | 7.936        | 20       | 11.15 AM        | 510                | 1.65            | 0.72                        | 0.56                         | 0.52                         | 64      | 60       | DO.             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 28   | 3      | 7.936        | 20       | 12.15 PM        | 30                 | 0.05            | 0.21                        | 0.20                         | 0.10                         | 64      | 60       | DO.             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |
| Dec. 28   | 3      | 7.936        | 20       | 12.15 PM        | 30                 | 3.41            | 0.21                        | 0.20                         | 0.10                         | 64      | 60       | DO.             |                  |                 |                    |      |                        |      |                           |         |                      | DO.                                  |





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH December, 19 37  
 SHEET 12 OF 12 SHEETS

 PROJECT SCS Experiment Station, Tyler, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date                                |                | Watershed |              | Rainfall           |                 |                            |                                     | Transpiration (Gardner P. J.) |         |              |                 | Runoff          |             |      |                                  | Runoff Modulus (cfs per sq. mi.) |                        | Condition of Watershed           |  |
|-------------------------------------|----------------|-----------|--------------|--------------------|-----------------|----------------------------|-------------------------------------|-------------------------------|---------|--------------|-----------------|-----------------|-------------|------|----------------------------------|----------------------------------|------------------------|----------------------------------|--|
| Number                              | Area (sq. mi.) | Gage No.  | Begin (hour) | Duration (minutes) | Amount (inches) | Estimate (inches per hour) | Maximum Intensity (inches per hour) | Maximum                       | Minimum | Begin (hour) | End (hour)      | Amount (inches) | Cu ft. sec. | Time | Runoff Modulus (cfs per sq. mi.) | Runoff Modulus (cfs per sq. mi.) | Condition of Watershed |                                  |  |
| (1)                                 | (2)            | (3)       | (4)          | (5)                | (6)             | (7)                        | (8)                                 | (9)                           | (10)    | (11)         | (12)            | (13)            | (14)        | (15) | (16)                             | (17)                             | (18)                   | (19)                             |  |
| Dec. 21                             | 4              | 5.717     | 10           | 10:33PM            | 105             | 0.14                       | 0.24                                | 0.12                          | 52      | 39           | NRO             |                 |             |      |                                  |                                  |                        | Cotton dormant soil moist, firm. |  |
| Dec. 22                             | 4              | DO.       | 10           | 2:36AM             | 12              | 0.02                       | 2/                                  | 0.12                          | 51      | 45           | NRO             |                 |             |      |                                  |                                  |                        | DO.                              |  |
| Dec. 22                             | 4              | DO.       | 10           | 4:18AM             | 910             | 1.23                       | 0.18                                | 0.08                          | 51      | 43           | 8:50A, 12:12P.  |                 |             |      | 0.06                             | 9.04                             |                        | DO.                              |  |
| Dec. 22                             | 4              | DO.       | 10           | 8:33PM             | 120             | 0.12                       | 0.09                                | 0.08                          | 51      | 43           | 12:18P, 10:14PM |                 |             |      | 0.23                             | 1.06                             |                        | DO.                              |  |
| Dec. 26                             | 4              | DO.       | 10           | 4:15AM             | 90              | 0.08                       | 0.12                                | 0.08                          | 61      | 52           | NRO             |                 |             |      |                                  |                                  |                        | DO.                              |  |
| Dec. 27                             | 4              | DO.       | 10           | 2:35AM             | 125             | 0.07                       | 2/                                  | 0.04                          | 69      | 59           | NRO             |                 |             |      |                                  |                                  |                        | DO.                              |  |
| Dec. 27                             | 4              | DO.       | 10           | 2:15AM             | 20              | 0.02                       | 0.12                                | 0.04                          | 69      | 59           | NRO             |                 |             |      |                                  |                                  |                        | DO.                              |  |
| Dec. 27                             | 4              | DO.       | 10           | 10:03PM            | 60              | 0.03                       | 2/                                  | 0.08                          | 61      | 60           | NRO             |                 |             |      |                                  |                                  |                        | DO.                              |  |
| Dec. 28                             | 4              | DO.       | 10           | 3:55AM             | 385             | 1.67                       | 2/                                  | 0.08                          | 61      | 60           | 5:13AM 12:12P.  |                 |             |      | 2.73                             | 8.02A.                           |                        | DO.                              |  |
| Dec. 28                             | 4              | DO.       | 10           | 12:15PM            | 351             | 0.03                       | 2/                                  | 0.08                          | 61      | 60           | NRO             |                 |             |      |                                  |                                  |                        | DO.                              |  |
| Dec. 21                             | 5              | 1.570     | 12           | 11:03AM            | 105             | 0.11                       | 0.12                                | 0.08                          | 52      | 39           | NRO             |                 |             |      |                                  | 2.733                            | 0.331                  | DO.                              |  |
| Dec. 22                             | 5              | DO.       | 12           | 2:13AM             | 960             | 1.27                       | 0.18                                | 0.08                          | 51      | 43           | 8:50A, 12:12P.  |                 |             |      |                                  |                                  |                        | DO.                              |  |
| Dec. 22                             | 5              | DO.       | 12           | 5:13AM             | 95              | 0.13                       | 0.12                                | 0.08                          | 51      | 43           | 12:18P, 10:14PM |                 |             |      | 0.04                             | 10.27A.                          |                        | DO.                              |  |
| Dec. 26                             | 5              | DO.       | 12           | 4:17AM             | 105             | 0.07                       | 0.12                                | 0.08                          | 61      | 52           | NRO             |                 |             |      | 0.06                             | 1.00PM                           |                        | DO.                              |  |
| Dec. 27                             | 5              | DO.       | 12           | 2:32AM             | 90              | 0.04                       | 2/                                  | 0.04                          | 69      | 59           | NRO             |                 |             |      |                                  |                                  |                        | DO.                              |  |
| Dec. 27                             | 5              | DO.       | 12           | 7:26AM             | 80              | 0.05                       | 0.12                                | 0.08                          | 69      | 59           | NRO             |                 |             |      |                                  |                                  |                        | DO.                              |  |
| Dec. 28                             | 5              | DO.       | 12           | 1:52AM             | 30              | 0.03                       | 2/                                  | 0.08                          | 61      | 59           | NRO             |                 |             |      |                                  |                                  |                        | DO.                              |  |
| Dec. 28                             | 5              | DO.       | 12           | 4:04AM             | 380             | 1.63                       | 0.72                                | 0.06                          | 61      | 59           | 4:17A, 12:12P.  |                 |             |      | 0.416                            | 7.157A.                          |                        | DO.                              |  |
| Dec. 28                             | 5              | DO.       | 12           | 12:30PM            | 30              | 0.02                       | 2/                                  | 0.04                          | 61      | 59           | NRO             |                 |             |      |                                  |                                  |                        | DO.                              |  |
| Dec. 30                             | 3              | 7.936     | 20           | 9:13AM             | 30              | 3.35                       | 0.12                                | 0.08                          | 65      | 56           | NRO             |                 |             |      |                                  | 1.600                            | 0.354                  | DO.                              |  |
| Dec. 30                             | 4              | 5.717     | 10           | 9:10AM             | 15              | 0.07                       | 0.36                                | 0.23                          | 65      | 56           | NRO             |                 |             |      |                                  |                                  |                        | DO.                              |  |
| Dec. 30                             | 5              | 1.570     | 12           | 9:10AM             | 60              | 0.06                       | 0.24                                | 0.12                          | 65      | 56           | NRO             |                 |             |      |                                  |                                  |                        | DO.                              |  |
| Dec. 31                             | 3              | 7.936     | 20           | 4:13PM             | 30              | 0.01                       | 0.12                                | 0.08                          | 65      | 56           | NRO             |                 |             |      |                                  |                                  |                        | DO.                              |  |
| Dec. 31                             | 4              | 5.717     | 10           | 4:10PM             | 10              | 0.02                       | 0.12                                | 0.08                          | 65      | 56           | NRO             |                 |             |      |                                  |                                  |                        | DO.                              |  |
| Dec. 31                             | 5              | 1.570     | 12           | 5:00PM             | 60              | 0.01                       | 2/                                  | 0.08                          | 65      | 56           | NRO             |                 |             |      |                                  |                                  |                        | DO.                              |  |
| Tabulation symbols                  |                |           |              |                    |                 |                            |                                     |                               |         |              |                 |                 |             |      |                                  |                                  |                        |                                  |  |
| 1/--Rain froze while falling        |                |           |              |                    |                 |                            |                                     |                               |         |              |                 |                 |             |      |                                  |                                  |                        |                                  |  |
| 2/--Leads than 0.01 inch per period |                |           |              |                    |                 |                            |                                     |                               |         |              |                 |                 |             |      |                                  |                                  |                        |                                  |  |
| 3/--Snow                            |                |           |              |                    |                 |                            |                                     |                               |         |              |                 |                 |             |      |                                  |                                  |                        |                                  |  |
| 4/--Measurements from slit box      |                |           |              |                    |                 |                            |                                     |                               |         |              |                 |                 |             |      |                                  |                                  |                        |                                  |  |
| 5/--Record lost                     |                |           |              |                    |                 |                            |                                     |                               |         |              |                 |                 |             |      |                                  |                                  |                        |                                  |  |

Tabulation symbols  
 1/--Rain from while falling  
 2/--Less than 0.01 inch per period  
 3/--Snow  
 4/--Measurements from alt box  
 5/--Record lost

Cotton dormant soil moist, firm.

Cotton dormant soil moist, firm.

Cotton dormant soil moist, firm.

Cotton dormant soil moist, firm.

Cotton dormant soil moist, firm.

Cotton dormant soil moist, firm.

Cotton dormant soil moist, firm.

Cotton dormant soil moist, firm.

Cotton dormant soil moist, firm.

Cotton dormant soil moist, firm.

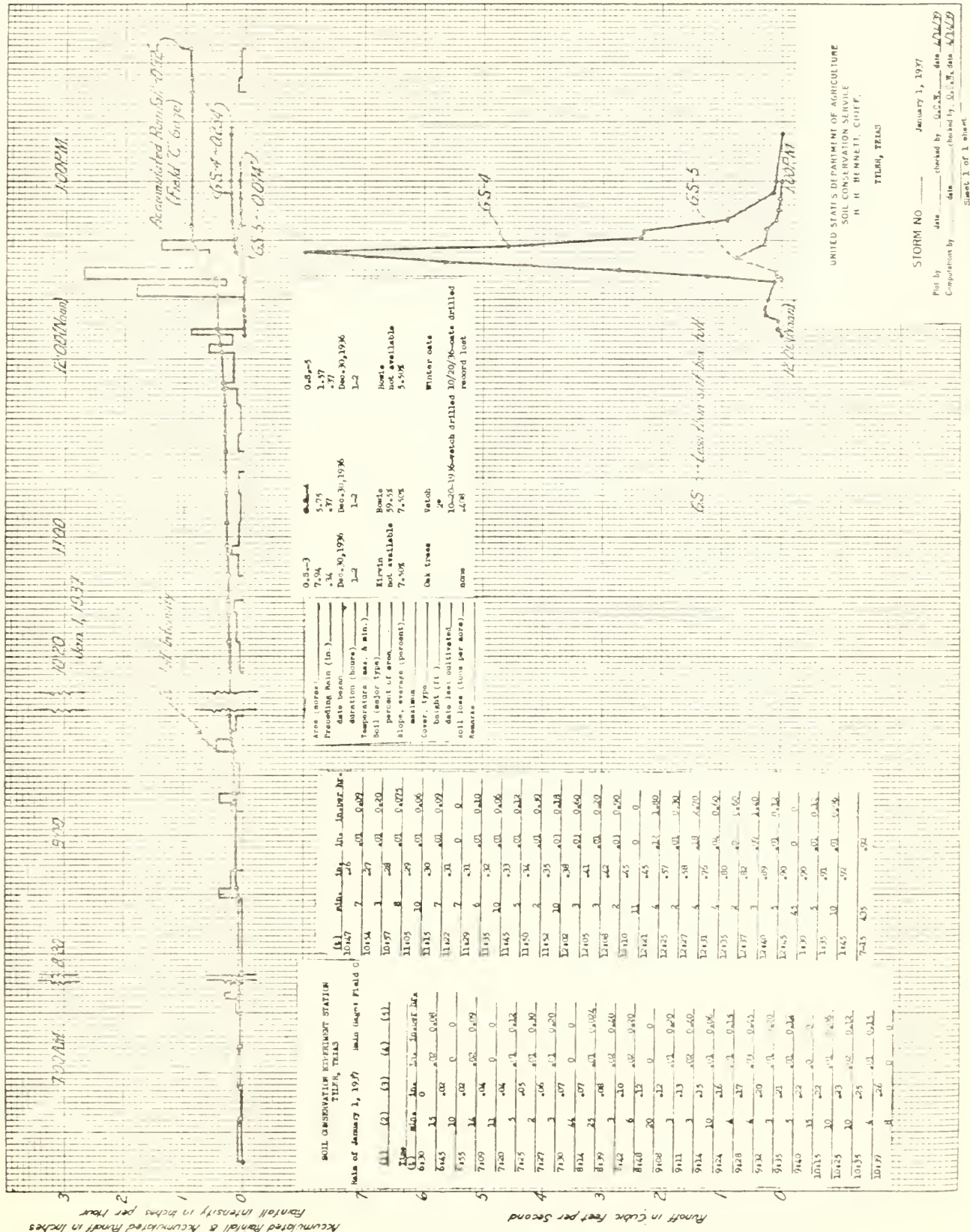
Cotton dormant soil moist, firm.

Cotton dormant soil moist, firm.

Cotton dormant soil moist, firm.



22 June

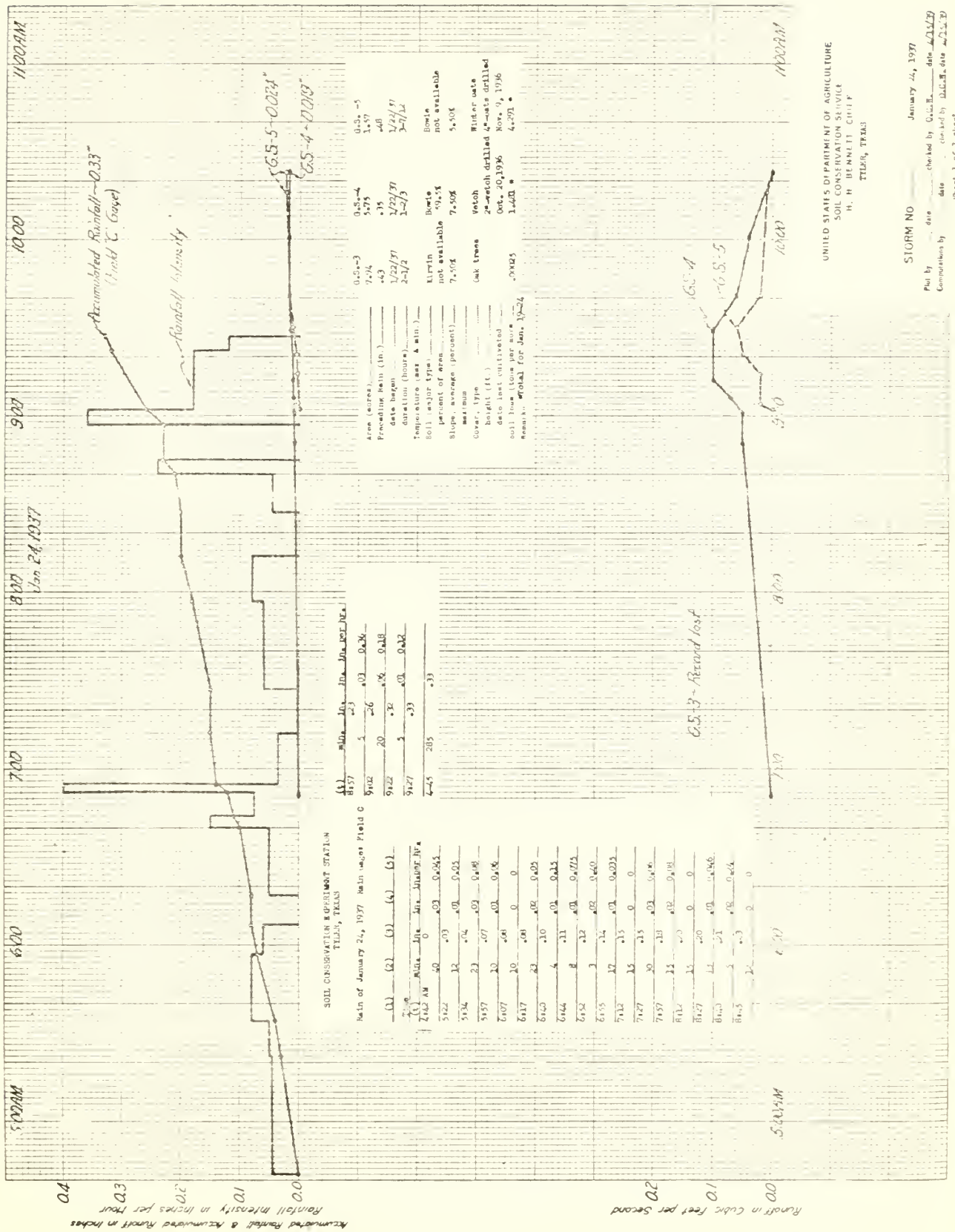


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UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT, CHIEF  
TILDEN, TEXAS

STORM NO. \_\_\_\_\_ January 24, 1937  
 Plot by \_\_\_\_\_ checked by G. L. H. \_\_\_\_\_ date 4/11/39  
 Computation by \_\_\_\_\_ date \_\_\_\_\_ checked by H. H. B. \_\_\_\_\_ date 4/21/39  
 Sheet 1 of 2 sheets



11/11/11





10/11/11



10



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Page 1





10/10/10







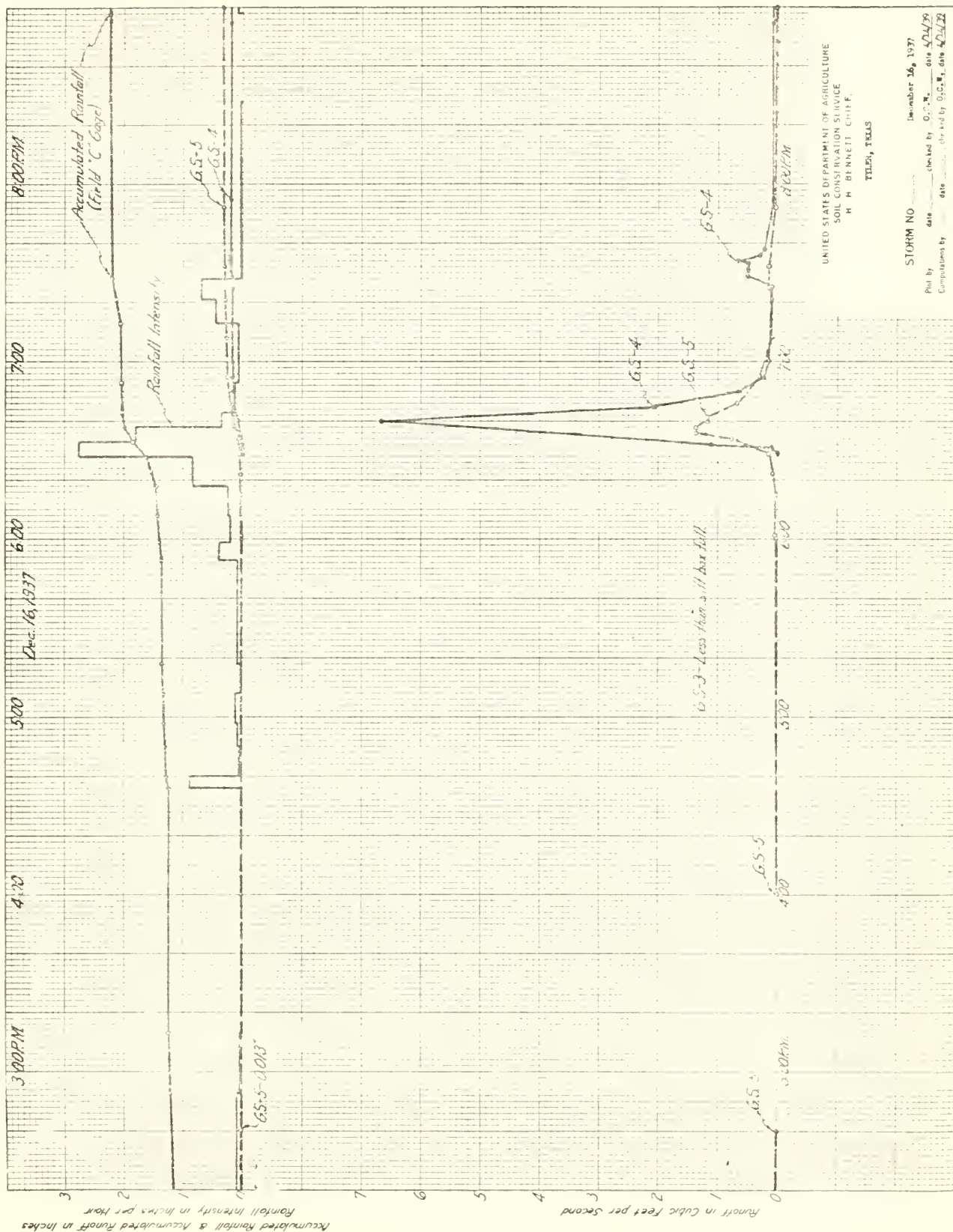


Handwritten signature or mark in purple ink, possibly reading "M. J. Smith".

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1507



UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT, CHIEF

TELE. TELLS

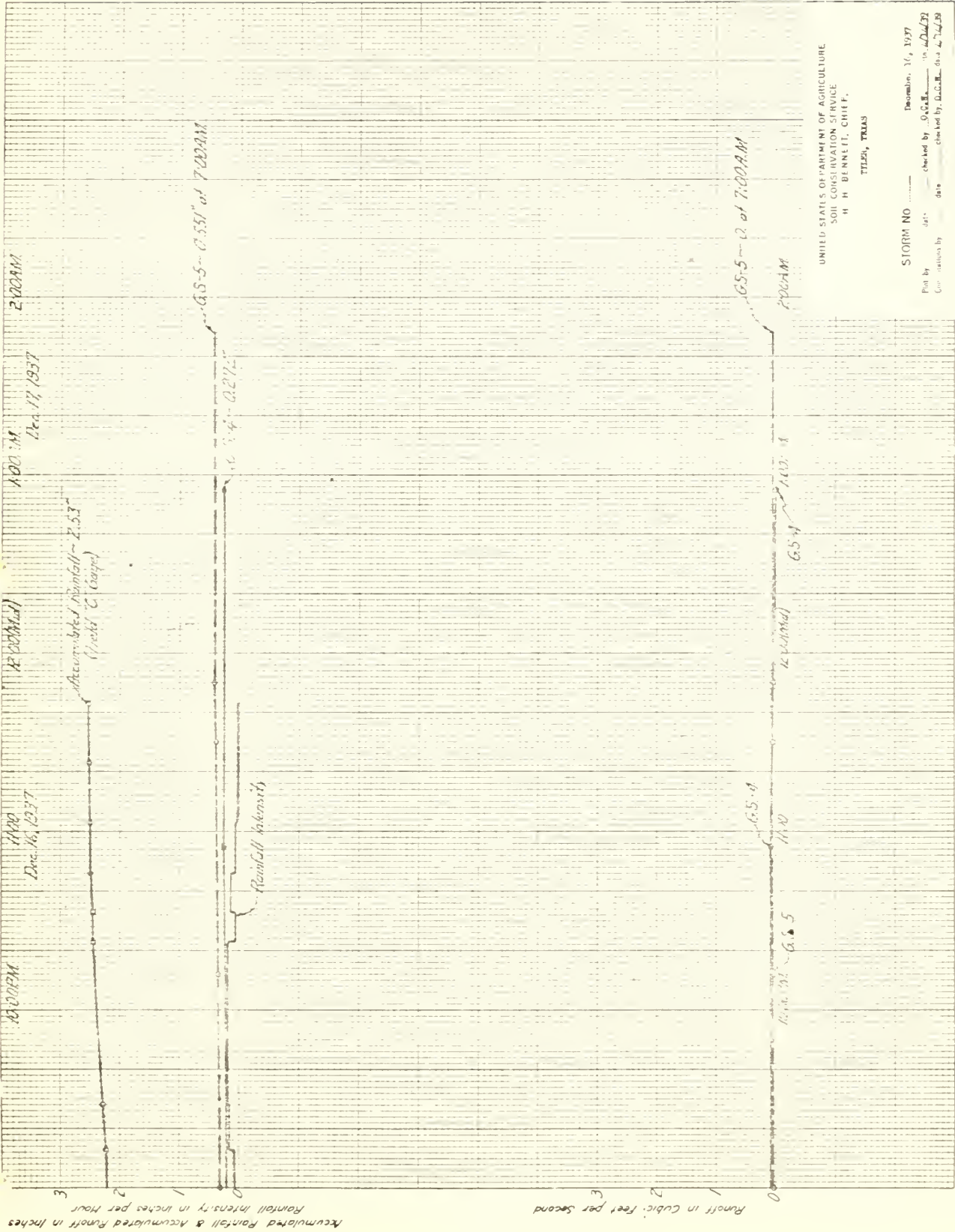
STORM NO. 65-5-1013  
Plotted by O. S. M. checked by O. S. M. date 4/24/39  
Completed by O. S. M. checked by O. S. M. date 4/24/39  
Sheet 2 of 3 sheets



11/10/11

11/10/11





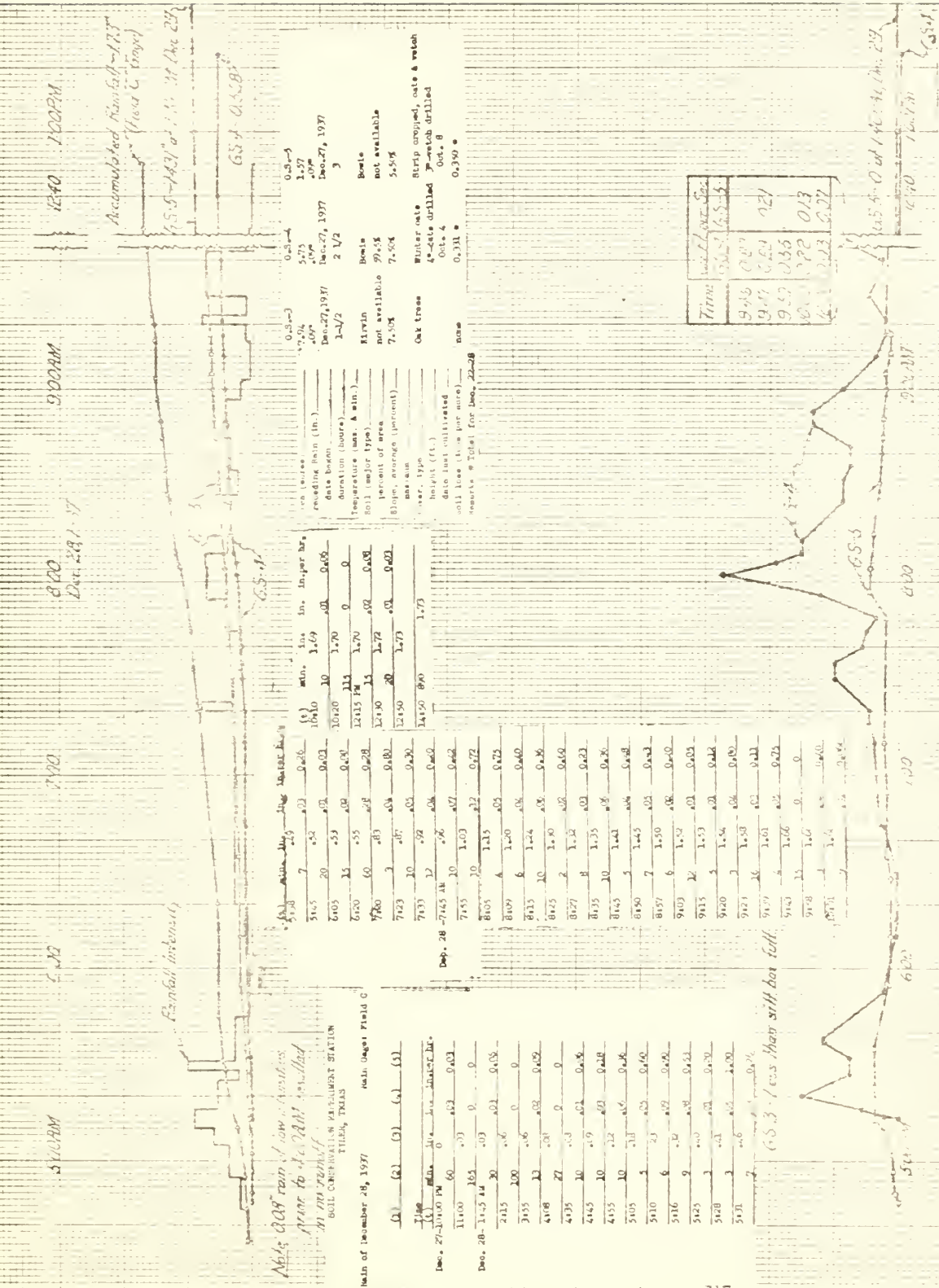








Accumulated Rainfall & Accumulated Runoff in inches



UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BENNETT, CHIEF  
Tyler, Texas

STORM NO. \_\_\_\_\_  
Date \_\_\_\_\_  
Checked by \_\_\_\_\_  
Computation by \_\_\_\_\_  
Sheet 1 of 1 sheet





1933



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH January, 1938  
 SHEET 1 OF 13 SHEETS

## RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

 Project SCS Experiment Station, Tex-P.  
Dyer, Texas

| Date      | WATERGAGE |              | RAINFALL |             |                    |                 |                             |                              | TEMPERATURE (degrees F)      |         | RUN-OFF  |               |                 |              | Rainfall minus Run-off (inches) | Run Loss (acre per acre) | CONDITION OF WATERSHED                                                                    |      |
|-----------|-----------|--------------|----------|-------------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|---------|----------|---------------|-----------------|--------------|---------------------------------|--------------------------|-------------------------------------------------------------------------------------------|------|
|           | Number    | Area (acres) | Gage No. | Time (hour) | Duration (minutes) | Amount (inches) | MAXIMUM INTENSITY           |                              |                              | Maximum | Minimum  | Inches (hour) | Amount (inches) | MAXIMUM RATE |                                 |                          |                                                                                           |      |
|           |           |              |          |             |                    |                 | 8 minutes (inches per hour) | 16 minutes (inches per hour) | 30 minutes (inches per hour) |         |          |               |                 | On ft. sec   |                                 |                          |                                                                                           | Time |
| (1)       | (2)       | (3)          | (4)      | (5)         | (6)                | (7)             | (8)                         | (9)                          | (10)                         | (11)    | (12)     | (13)          | (14)            | (15)         | (16)                            | (17)                     | (18)                                                                                      |      |
| Jan. 5    | 3         | 7.936        | 19       | 5:30PM      | 3                  | 0.19            | 0.24                        | 0.16                         | 0.10                         | 53      | MRO      |               |                 |              |                                 |                          | Oaks dormant; good ground cover of leaves; soil wet.                                      |      |
| Jan. 6    | 3         | 7.936        | 19       | 12:05AM     | 595                | 0.49            | 0.24                        | 0.16                         | 0.12                         | 50      | MRO      |               |                 |              |                                 |                          |                                                                                           |      |
| Jan. 5    | 4         | 5.747        | 10       | 5:30PM      | 340                | 0.68            | 0.24                        | 0.12                         | 0.10                         | 53      | MRO      |               |                 |              |                                 |                          | Cotton dormant; oaks, good stand 12-5" high; soil wet, firm.                              |      |
| Jan. 6    | 4         | 5.747        | 10       | 12:05AM     | 595                | 0.21            | 0.24                        | 0.16                         | 0.12                         | 50      | MRO      |               |                 |              |                                 |                          |                                                                                           |      |
| Jan. 5    | 5         | 1.57         | 12       | 5:30PM      | 270                | 0.67            | 0.24                        | 0.16                         | 0.12                         | 53      |          |               |                 |              |                                 |                          | Vetch 3" fair, wet, firm                                                                  |      |
| Jan. 6    | 5         | 1.57         | 12       | 12:05AM     | 620                | 0.48            | 0.24                        | 0.16                         | 0.14                         | 50      | Silt Box |               | 0.054           | No Rate      | 0.616                           | None                     | Oaks dormant; good ground cover of leaves; soil wet.                                      |      |
| Jan. 9-10 | 3         | 7.936        | 19       |             |                    | 0.17            |                             |                              |                              | 107.39  | MRO      |               |                 |              |                                 |                          | Cotton dormant; oaks, good stand 12-5" high; soil wet, firm.                              |      |
| Jan. 9-10 | 4         | 5.747        | 10       |             |                    | 0.15            |                             |                              |                              |         | MRO      |               |                 |              |                                 |                          | Vetch 3" fair, wet, firm; oaks 8" high; soil wet, firm.                                   |      |
| Jan. 9-10 | 5         | 1.57         | 12       |             |                    | 0.14            |                             |                              |                              |         | MRO      |               |                 |              |                                 |                          | Oaks dormant; good ground cover of leaves; soil wet, firm.                                |      |
| Jan. 20   | 3         | 7.936        | 19       | 3:30PM      | 160                | 0.15            |                             |                              |                              | 67      | MRO      |               |                 |              |                                 |                          | Oaks dormant; good ground cover of leaves; soil wet, firm.                                |      |
| Jan. 20   | 4         | 5.747        | 10       | 3:30PM      | 160                | 0.15            |                             |                              |                              | 67      | MRO      |               |                 |              |                                 |                          | Cotton dormant; oaks good stand 12-5" high; soil wet, firm.                               |      |
| Jan. 20   | 5         | 1.57         | 12       | 3:30PM      | 160                | 0.13            |                             |                              |                              | 67      | MRO      |               |                 |              |                                 |                          | Vetch 3" fair, wet, firm                                                                  |      |
| Jan. 21   | 3         | 7.936        | 19       | 8:55PM      | 105                | 0.11            |                             |                              |                              | 67      | MRO      |               |                 |              |                                 |                          | Oaks 6", good, wet, firm                                                                  |      |
| Jan. 21   | 3         | 7.936        | 19       | 11:50PM     | 10                 | 0.03            |                             |                              |                              | 67      | MRO      |               |                 |              |                                 |                          | Oaks dormant; good ground cover of leaves; soil wet.                                      |      |
| Jan. 21   | 4         | 5.747        | 10       | 8:50PM      | 105                | 0.10            |                             |                              |                              | 67      | MRO      |               |                 |              |                                 |                          | Cotton dormant; oaks good stand 12-5" high; soil wet, firm.                               |      |
| Jan. 21   | 4         | 5.747        | 10       | 11:50PM     | 10                 | 0.04            |                             |                              |                              | 67      | MRO      |               |                 |              |                                 |                          | Vetch 3" fair, wet, firm                                                                  |      |
| Jan. 21   | 5         | 1.57         | 12       | 8:50PM      | 105                | 0.12            |                             |                              |                              | 67      | MRO      |               |                 |              |                                 |                          | Oaks 6", good, wet, firm                                                                  |      |
| Jan. 21   | 5         | 1.57         | 12       | 11:50PM     | 10                 | 0.01            |                             |                              |                              | 67      | MRO      |               |                 |              |                                 |                          | Oaks dormant; good ground cover of leaves; soil wet, firm.                                |      |
| Jan. 22   | 3         | 7.936        | 19       | 2:15AM      | 60                 | 0.05            |                             |                              |                              | 62      | MRO      |               |                 |              |                                 |                          | Cotton dormant; oaks good stand 12-5" high; soil wet, firm; oaks 8" high; soil wet, firm. |      |
| Jan. 22   | 4         | 5.747        | 10       | 2:30AM      | 40                 | 0.04            |                             |                              |                              | 62      | MRO      |               |                 |              |                                 |                          | Vetch 3" fair, wet, firm; oaks 8" high; soil saturated                                    |      |
| Jan. 22   | 5         | 1.57         | 12       | 2:30AM      | 80                 | 0.07            |                             |                              |                              | 62      | MRO      |               |                 |              |                                 |                          | Oaks dormant; good ground cover of leaves; soil wet, firm.                                |      |
| Jan. 23   | 3         | 7.936        | 19       | 3:40AM      | 615                | 3.52            | 3.00                        | 2.20                         | 1.70                         | 66      | 4:10AM   | 6:53PM        | 1.018           | 3.18         | 9:16AM                          | 0.128                    | Oaks dormant; good ground cover of leaves; soil wet, firm.                                |      |
| Jan. 23   | 4         | 5.747        | 10       | 3:40AM      | 630                | 3.46            | 1.78                        | 2.48                         | 2.06                         | 66      | 4:10AM   | 4:23PM        | 1.659           | 16.10        | 9:09AM                          | 2.240                    | Cotton dormant; oaks good stand 12-5" high; soil wet, firm; oaks 8" high; soil saturated  |      |
| Jan. 23   | 5         | 1.57         | 12       | 6:00PM      | 767                | 3.37            | 1.56                        | 0.96                         | 0.68                         | 66      | 3:49AM   | 7:25AM        | 2.960           | 3.26         | 9:10AM                          | 1.168                    | Vetch 3" fair, wet, firm; oaks 8" high; soil saturated                                    |      |
| Jan. 23   | 5         | 1.57         | 12       | Total       | 10                 | 0.02            |                             |                              |                              | 66      |          |               |                 |              |                                 |                          | Oaks dormant; good ground cover of leaves; soil wet, firm; oaks 8" high; soil saturated   |      |
| Jan. 23   | 5         | 1.57         | 12       | 6:00PM      | 10                 | 0.01            |                             |                              |                              | 66      |          |               |                 |              |                                 |                          | Cotton dormant; oaks good stand, 2-4" high.                                               |      |
| Jan. 23   | 4         | 5.747        | 10       | 6:00PM      | 10                 | 0.02            |                             |                              |                              | 66      |          |               |                 |              |                                 |                          |                                                                                           |      |

1/ Jan. 26, 1938 2/ Jan. 21, 1938

1/ Jan. 26, 1938 2/ Jan. 24, 1938





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 Month February, 19 39  
 Sheet 2 of 13 SHEETS

## RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

 Project SCS Experiment Station, Tex-42,  
Tyler, Texas

| Date    | Watershed |                 | Rainfall |                 |                       |                    | Temperature (degrees F)        |                                 | Run-off                      |                              |                 | Rainfall Minus<br>(inches) | Run-off<br>(cfs per sec) | Run-off<br>(cfs per acre) | Condition of Watershed |               |                                                               |                             |      |
|---------|-----------|-----------------|----------|-----------------|-----------------------|--------------------|--------------------------------|---------------------------------|------------------------------|------------------------------|-----------------|----------------------------|--------------------------|---------------------------|------------------------|---------------|---------------------------------------------------------------|-----------------------------|------|
|         | Number    | Area<br>(acres) | Oggs No. | Begin<br>(hour) | Duration<br>(minutes) | Amount<br>(inches) | Maximum Intensity              |                                 | Maximum<br>(inches per hour) | Minimum<br>(inches per hour) | Begin<br>(hour) |                            |                          |                           |                        | End<br>(hour) | Amount<br>(inches)                                            | Maximum Rate<br>Cfs per sec | Time |
|         |           |                 |          |                 |                       |                    | 5 minutes<br>(inches per hour) | 15 minutes<br>(inches per hour) |                              |                              |                 |                            |                          |                           |                        |               |                                                               |                             |      |
| (1)     | (2)       | (3)             | (4)      | (5)             | (6)                   | (7)                | (8)                            | (9)                             | (10)                         | (11)                         | (12)            | (13)                       | (14)                     | (15)                      | (16)                   | (17)          | (18)                                                          |                             |      |
| Jan. 30 | 3         | 7.936           | 19       |                 |                       | 0.02               |                                |                                 | 65                           | 35                           | NRO             |                            |                          |                           |                        |               | Oaks dormant; good ground cover<br>of leaves; soil wet.       |                             |      |
| Jan. 30 | 3         | 7.936           | 19       |                 |                       | 0.01               |                                |                                 | 65                           | 35                           | NRO             |                            |                          |                           |                        |               | Cotton dormant; oats good stand<br>2-7" high; soil wet, firm. |                             |      |
| Jan. 30 | 4         | 5.747           | 10       |                 |                       | 0.02               |                                |                                 | 65                           | 35                           | NRO             |                            |                          |                           |                        |               | Wet 3", fair, wet, firm; oats<br>0-12", good, wet, firm.      |                             |      |
| Jan. 30 | 4         | 5.747           | 10       |                 |                       | 0.01               |                                |                                 | 65                           | 35                           | NRO             |                            |                          |                           |                        |               |                                                               |                             |      |
| Jan. 30 | 5         | 1.57            | 12       |                 |                       | 0.02               |                                |                                 | 65                           | 35                           | NRO             |                            |                          |                           |                        |               |                                                               |                             |      |
| Jan. 30 | 5         | 1.57            | 12       |                 |                       | 0.01               |                                |                                 | 65                           | 35                           | NRO             |                            |                          |                           |                        |               |                                                               |                             |      |

8-13-41

UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH February, 19 38  
 SHEET 3 OF 13 NINETEEN

 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS  
 Project SCS Experiment Station, Tex-82  
 Tyler, Texas

| Date       | Watershed |              | Rainfall |              |                    |                 |                            |                              |                              |               |         |              | Temperature (degrees F) |              |         | Run-off |      |      |                                                         | Rainfall minus (inches) | Run Loss (tons per acre) | Conversion of Watershed |
|------------|-----------|--------------|----------|--------------|--------------------|-----------------|----------------------------|------------------------------|------------------------------|---------------|---------|--------------|-------------------------|--------------|---------|---------|------|------|---------------------------------------------------------|-------------------------|--------------------------|-------------------------|
|            | Number    | Area (acres) | Gage No. | Begin (hour) | Duration (minutes) | Amount (inches) | Maximum Intensity          |                              |                              | Transpiration |         | Begin (hour) | Amount (inches)         | Maximum Rate |         |         |      |      |                                                         |                         |                          |                         |
|            |           |              |          |              |                    |                 | 1 minute (inches per hour) | 15 minutes (inches per hour) | 30 minutes (inches per hour) | Maximum       | Minimum |              |                         | Cu ft. sec.  | Time    |         |      |      |                                                         |                         |                          |                         |
| Feb. 16    | 3         | 7.936        | 19       |              |                    | 0.03            |                            |                              |                              | 69            | 60      | MRO          | (13)                    | (14)         | (15)    | (16)    | (17) | (18) | Oaks dormant, good ground cover of 1 leaves, soil moist |                         |                          |                         |
| Feb. 16    | 3         | 7.936        | 19       |              |                    | 0.06            |                            |                              |                              | "             | "       | MRO          |                         |              |         |         |      |      | Cotton dormant; oats good stand                         |                         |                          |                         |
| Feb. 16    | 4         | 5.747        | 10       |              |                    | 0.03            |                            |                              |                              | "             | "       | MRO          |                         |              |         |         |      |      | Wet 5" fair, moist, firm                                |                         |                          |                         |
| Feb. 16    | 4         | 5.747        | 10       |              |                    | 0.07            |                            |                              |                              | "             | "       | MRO          |                         |              |         |         |      |      | Oats 8-12", good, moist, firm                           |                         |                          |                         |
| Feb. 16    | 5         | 1.57         | 12       |              |                    | 0.02            |                            |                              |                              | "             | "       | MRO          |                         |              |         |         |      |      | Oaks dormant, good ground cover of 1 leaves; soil wet   |                         |                          |                         |
| Feb. 16    | 5         | 1.57         | 12       |              |                    | 0.05            |                            |                              |                              | "             | "       | MRO          |                         |              |         |         |      |      | Cotton dormant; oats good stand                         |                         |                          |                         |
| Feb. 17    | 3         | 7.936        | 19       |              |                    | 0.06            |                            |                              |                              | 78            | 61      | MRO          |                         |              |         |         |      |      | Wet 3" fair, moist, firm; oats 8-12", good, moist, firm |                         |                          |                         |
| Feb. 17    | 3         | 7.936        | 19       |              |                    | 0.03            |                            |                              |                              | "             | "       | MRO          |                         |              |         |         |      |      | Oaks dormant, good ground cover of 1 leaves; soil moist |                         |                          |                         |
| Feb. 17    | 3         | 7.936        | 19       | 5:21 PM      | 233                | 0.06            | 0.64                       | 0.68                         | 0.34                         | "             | "       | MRO          |                         |              |         |         |      |      | Cotton dormant; oats good stand                         |                         |                          |                         |
| Feb. 17    | 4         | 5.747        | 10       |              |                    | 0.07            |                            |                              |                              | "             | "       | MRO          |                         |              |         |         |      |      | Wet 3" fair, moist, firm; oats 8-12", good, moist, firm |                         |                          |                         |
| Feb. 17    | 4         | 5.747        | 10       |              |                    | 0.03            |                            |                              |                              | "             | "       | MRO          |                         |              |         |         |      |      | Oaks dormant, good ground cover of 1 leaves; soil moist |                         |                          |                         |
| Feb. 17    | 4         | 5.747        | 10       | 5:22 PM      | 220                | 0.07            | 1.08                       | 0.64                         | 0.34                         | "             | "       | MRO          |                         |              |         |         |      |      | Cotton dormant; oats good stand                         |                         |                          |                         |
| Feb. 17    | 5         | 1.57         | 12       |              |                    | 0.08            |                            |                              |                              | "             | "       | MRO          |                         |              |         |         |      |      | Wet 3" fair, moist, firm; oats 8-12", good, moist, firm |                         |                          |                         |
| Feb. 17    | 5         | 1.57         | 12       |              |                    | 0.02            |                            |                              |                              | "             | "       | MRO          |                         |              |         |         |      |      | Oaks dormant, good ground cover of 1 leaves; soil moist |                         |                          |                         |
| Feb. 17-18 | 3         | 7.936        | 19       | 10:37 AM     | 415                | 0.70            | 0.48                       | 0.36                         | 0.36                         | 78            | 62      | MRO          |                         |              |         |         |      |      | Cotton dormant; oats good stand                         |                         |                          |                         |
| Feb. 17-18 | 4         | 5.747        | 10       | 10:55 AM     | 420                | 0.65            | 0.48                       | 0.40                         | 0.30                         | "             | "       | MRO          |                         |              |         |         |      |      | Wet 3" fair, moist, firm; oats 8-12", good, moist, firm |                         |                          |                         |
| Feb. 17    | 5         | 1.57         | 12       | 5:21 PM      | 160                | 0.46            | 1.44                       | 0.56                         | 0.28                         | 78            | 61      | MRO          |                         |              |         |         |      |      | Oaks dormant, good ground cover of 1 leaves; soil moist |                         |                          |                         |
| Feb. 17-18 | 5         | 1.57         | 12       | 10:41 AM     | 425                | 0.66            | 0.48                       | 0.40                         | 0.38                         | 78            | 62      | MRO          |                         |              |         |         |      |      | Cotton dormant; oats good stand                         |                         |                          |                         |
| Feb. 21    | 3         | 7.936        | 19       | Total        | 380                | 1.12            | 0.24                       | 0.24                         | 0.20                         | 144           | 36      | Silt Box     |                         | 0.021        | No Rate |         |      |      | Wet 3" fair, moist, firm; oats 8-12", good, moist, firm |                         |                          |                         |
| Feb. 21    | 4         | 5.747        | 10       | 9:11 AM      | 355                | 0.38            | 0.36                       | 0.24                         | 0.21                         | "             | "       | MRO          |                         |              |         |         |      |      | Oaks dormant, good ground cover of 1 leaves; soil moist |                         |                          |                         |
| Feb. 21    | 5         | 1.57         | 12       | 9:11 AM      | 365                | 0.38            | 0.36                       | 0.28                         | 0.22                         | "             | "       | MRO          |                         |              |         |         |      |      | Cotton dormant; oats good stand                         |                         |                          |                         |

1/ Feb. 17, 1938

2/ Feb. 17, 1938

3/ Feb. 17, 1938





UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
DIVISION OF RESEARCH

MONTH March, 1938  
SHEET 4 OF 13 SHEETS

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

PROJECT BCC Experiment Station, Tex-R2  
Taylor, Texas

| Date    | Watershed |                 | Rainfall        |                       |                    |                                                     | Temperature                     |                                 | Run-off        |                    |                    | Maple Run<br>(inches) | Size from<br>(acre per acre) | Condition of Watershed         |
|---------|-----------|-----------------|-----------------|-----------------------|--------------------|-----------------------------------------------------|---------------------------------|---------------------------------|----------------|--------------------|--------------------|-----------------------|------------------------------|--------------------------------|
|         | Number    | Area<br>(acres) | Begin<br>(hour) | Duration<br>(minutes) | Amount<br>(inches) | Maximum Intensity<br>3 minutes<br>(inches per hour) | 15 minutes<br>(inches per hour) | 30 minutes<br>(inches per hour) | Mean<br>(hour) | Filled<br>(inches) | Amount<br>(inches) | Out ft. sec.          | Time                         |                                |
| Mar. 5  | 3         | 7.936           | 19              |                       | 0.03               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 5  | 4         | 5.747           | 10              |                       | 0.03               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 5  | 5         | 1.57            | 12              |                       | 0.03               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 8  | 3         | 7.936           | 19              |                       | 0.07               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 8  | 4         | 5.747           | 10              |                       | 0.07               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 8  | 5         | 1.57            | 12              |                       | 0.07               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 9  | 3         | 7.936           | 19              |                       | 0.04               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 9  | 4         | 5.747           | 10              |                       | 0.05               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 9  | 5         | 1.57            | 12              |                       | 0.05               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 9  | 3         | 7.936           | 19              |                       | 0.05               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 9  | 4         | 5.747           | 10              |                       | 0.05               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 9  | 5         | 1.57            | 12              |                       | 0.05               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 9  | 3         | 7.936           | 19              |                       | 0.06               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 18 | 3         | 7.936           | 8:13PM          | 172                   | 0.97               | 2.61                                                | 1.14                            | 0.98                            | NRO            | 11:12PM            | 0.049              | 1.93                  | 10:57PM                      | Oaks in bud, fair, good ground |
| Mar. 18 | 4         | 5.747           | 8:09PM          | 172                   | 0.92               | 2.76                                                | 1.24                            | 0.94                            | NRO            | 11:12PM            | 0.049              | 1.93                  | 10:57PM                      | Oaks in bud, fair, good ground |
| Mar. 18 | 5         | 1.57            | 8:12PM          | 170                   | 0.82               | 1.80                                                | 0.92                            | 0.82                            | NRO            | 11:12PM            | 0.049              | 1.93                  | 10:57PM                      | Oaks in bud, fair, good ground |
| Mar. 22 | 3         | 7.936           | 19              |                       | 0.22               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 22 | 4         | 5.747           | 10              |                       | 0.23               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 22 | 5         | 1.57            | 12              |                       | 0.25               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 27 | 3         | 7.936           | 11:51PM         | 1405                  | 1.90               | 1.68                                                | 1.52                            | 1.06                            | NRO            | 7:57AM             |                    | 0.03                  | 6:18AM                       | Oaks in bud, fair, good ground |
| Mar. 27 | 4         | 5.747           | 8:50AM          | 120                   | 0.22               | 0.24                                                | 0.24                            | 0.20                            | NRO            | 12:58PM            |                    | 0.18                  | 7:10PM                       | Oaks in bud, fair, good ground |
| Mar. 27 | 5         | 1.57            | 5:20PM          | 15                    | 0.09               | 0.60                                                | 0.36                            | 0.18                            | NRO            | 8:50PM             |                    | 2.57                  | 4:47AM                       | Oaks in bud, fair, good ground |
| Mar. 28 | 3         | 7.936           | 6:40PM          | 60                    | 0.75               | 5.10                                                | 2.36                            | 1.30                            | NRO            | 7:30AM             | 0.114              | 2.57                  | 4:47AM                       | Oaks in bud, fair, good ground |
| Mar. 28 | 4         | 5.747           | Total           |                       | 2.96               | 1.68                                                | 1.48                            | 1.08                            | NRO            | 7:30AM             | 0.114              | 2.57                  | 4:47AM                       | Oaks in bud, fair, good ground |
| Mar. 28 | 5         | 1.57            | 8:50AM          | 105                   | 0.23               | 0.36                                                | 0.24                            | 0.20                            | NRO            | 8:50PM             | 0.627              | 2.57                  | 7:15PM                       | Oaks in bud, fair, good ground |
| Mar. 28 | 3         | 7.936           | 5:20PM          | 10                    | 0.11               | 0.60                                                | 0.36                            | 0.22                            | NRO            | 9:04PM             | 0.627              | 2.57                  | 7:15PM                       | Oaks in bud, fair, good ground |
| Mar. 28 | 4         | 5.747           | 6:41PM          | 60                    | 0.79               | 5.40                                                | 2.36                            | 1.13                            | NRO            | 9:04PM             | 0.627              | 2.57                  | 7:15PM                       | Oaks in bud, fair, good ground |
| Mar. 28 | 5         | 1.57            | Total           |                       | 2.96               | 2.04                                                | 2.04                            | 1.13                            | NRO            | 9:04PM             | 0.627              | 2.57                  | 7:15PM                       | Oaks in bud, fair, good ground |
| Mar. 28 | 3         | 7.936           | 12:02AM         | 120                   | 1.65               | 2.04                                                | 1.32                            | 1.02                            | NRO            | 9:22AM             | 0.627              | 2.57                  | 7:15PM                       | Oaks in bud, fair, good ground |
| Mar. 28 | 4         | 5.747           | 8:45AM          | 105                   | 0.24               | 0.24                                                | 0.24                            | 0.18                            | NRO            | 9:22AM             | 0.627              | 2.57                  | 7:15PM                       | Oaks in bud, fair, good ground |
| Mar. 28 | 5         | 1.57            | 5:21PM          | 10                    | 0.10               | 0.60                                                | 0.36                            | 0.20                            | NRO            | 9:22AM             | 0.627              | 2.57                  | 7:15PM                       | Oaks in bud, fair, good ground |
| Mar. 28 | 3         | 7.936           | 6:46PM          | 65                    | 0.97               | 6.24                                                | 2.68                            | 1.64                            | NRO            | 9:22AM             | 0.627              | 2.57                  | 7:15PM                       | Oaks in bud, fair, good ground |
| Mar. 28 | 4         | 5.747           | Total           |                       | 2.93               | 2.93                                                | 2.68                            | 1.64                            | NRO            | 9:22AM             | 0.627              | 2.57                  | 7:15PM                       | Oaks in bud, fair, good ground |
| Mar. 30 | 3         | 7.936           | 19              |                       | 0.03               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 30 | 4         | 5.747           | 10              |                       | 0.03               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 30 | 5         | 1.57            | 12              |                       | 0.04               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 31 | 3         | 7.936           | 19              |                       | 0.06               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 31 | 4         | 5.747           | 10              |                       | 0.05               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |
| Mar. 31 | 5         | 1.57            | 12              |                       | 0.04               |                                                     |                                 |                                 | NRO            |                    |                    |                       |                              | Oaks in bud, fair, good ground |

1/ March 26, 1938 2/ March 26, 1938 3/ March 30, 1938





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH
MONTH April, 1938SHEET 5 OF 13 SHEETS

## RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

 Project SCS Experiment Station, Tex-B2,  
 Tyler, Texas

| Date     | Watershed |              | Rainfall |              |                    |                 |                             |                              | Temperature (degree F.)      |         |                      | Run-off       |                 |              |         | Rainfall Meets Run-off (inches) | Silt Loss (tons per acre) | Condition of Watershed                                                 |
|----------|-----------|--------------|----------|--------------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|---------|----------------------|---------------|-----------------|--------------|---------|---------------------------------|---------------------------|------------------------------------------------------------------------|
|          | Number    | Area (acres) | Gage No. | Begin (hour) | Duration (minutes) | Amount (inches) | Maximum Intensity           |                              |                              | Minimum | Depth (inches)       | Period (hour) | Amount (inches) | Maximum Rate |         |                                 |                           |                                                                        |
|          |           |              |          |              |                    |                 | 5 minutes (inches per hour) | 15 minutes (inches per hour) | 30 minutes (inches per hour) |         |                      |               |                 | Cu ft. sec.  | Time    |                                 |                           |                                                                        |
| April 5  | 3         | 7.936        | 19       | 5:55PM       | 10                 | 0.30            | 3.00                        | 1.20                         | 0.60                         | 61      | NPO                  | (13)          | (14)            | (15)         | (16)    | (17)                            | (18)                      | Oaks in full leaf, fair cover. Leaves & underbrush, soil wet.          |
| April 6  | 3         | 7.936        | 19       | 2:00AM       | 30                 | 0.02            | 0.04                        | 0.04                         | 0.04                         | 61      | NRO                  |               |                 |              |         |                                 |                           |                                                                        |
| April 5  | 4         | 5.747        | 10       | 5:55PM       | 10                 | 0.33            | 3.36                        | 1.32                         | 0.66                         | 61      | Silt Bdx             |               |                 |              | No Rate |                                 | 0.019                     | Cotton dormant; oats good stand 10-20" high, soil wet, firm.           |
| April 6  | 4         | 5.747        | 10       | 2:15AM       | 20                 | 0.02            | 0.04                        | 0.04                         | 0.04                         | 61      | Silt Bdx             |               |                 |              | No Rate |                                 |                           |                                                                        |
| April 5  | 5         | 1.57         | 12       | 5:55PM       | 10                 | 0.23            | 2.28                        | 0.92                         | 0.46                         | 61      | NRO                  |               |                 |              |         |                                 |                           |                                                                        |
| April 7  | 3         | 7.936        | 19       | 11:59PM      | 75                 | 0.60            | 2.88                        | 1.40                         | 0.90                         | 38      |                      |               |                 |              |         |                                 |                           |                                                                        |
| April 7  | 3         | 7.936        | 19       | 7:20AM       | 200                | 0.50            | 0.96                        | 0.40                         | 0.22                         | 38      |                      |               |                 |              |         |                                 |                           |                                                                        |
| April 7  | 4         | 5.747        | 10       | 11:57PM      | 75                 | 0.64            | 2.80                        | 1.44                         | 0.90                         | 38      | Silt Bdx             |               |                 |              | No Rate |                                 |                           |                                                                        |
| April 7  | 4         | 5.747        | 10       | 7:15AM       | 95                 | 0.22            | 1.20                        | 0.56                         | 0.34                         | 38      | 12:19AM 12:41PM      |               |                 |              |         |                                 |                           |                                                                        |
| April 7  | 4         | 5.747        | 10       | 9:59PM       | 127                | 0.25            | 0.36                        | 0.20                         | 0.21                         | 38      | 12:37AM 9:41AM       |               |                 |              |         |                                 |                           |                                                                        |
| April 7  | 5         | 1.57         | 12       | 11:58PM      | 75                 | 0.66            | 3.12                        | 1.52                         | 0.88                         | 38      |                      |               |                 |              |         |                                 |                           |                                                                        |
| April 7  | 5         | 1.57         | 12       | 7:30AM       | 100                | 0.29            | 1.32                        | 0.60                         | 0.31                         | 38      |                      |               |                 |              |         |                                 |                           |                                                                        |
| April 7  | 5         | 1.57         | 12       | 10:00PM      | 145                | 0.25            | 0.36                        | 0.28                         | 0.23                         | 38      |                      |               |                 |              |         |                                 |                           |                                                                        |
| April 15 | 3         | 7.936        | 19       | 3:12AM       | 170                | 0.70            | 1.20                        | 0.80                         | 0.50                         | 60      | NRO                  |               |                 |              | 6.11    | 12:43                           | 0.203                     | Oats 16-20", good; soil wet, firm.                                     |
| April 15 | 4         | 5.747        | 10       | 3:12AM       | 175                | 0.72            | 0.96                        | 0.60                         | 0.38                         | 60      | NRO                  |               |                 |              |         |                                 |                           |                                                                        |
| April 15 | 5         | 1.57         | 12       | 3:12AM       | 180                | 0.71            | 1.08                        | 0.60                         | 0.42                         | 60      | NRO                  |               |                 |              |         |                                 |                           |                                                                        |
| April 15 | 3         | 7.936        | 19       | 1:43PM       | 142                | 1.68            | 1.68                        | 1.32                         | 0.94                         | 60      | Silt Bdx             |               |                 |              | No Rate |                                 |                           |                                                                        |
| April 15 | 4         | 5.747        | 10       | 1:08PM       | 168                | 1.77            | 1.60                        | 1.40                         | 1.00                         | 60      | 2:19PM 9:54PM 2:04PM |               |                 |              | 0.15    | 2:30                            | 0.023                     | Oaks in full leaf, fair cover; leaves & underbrush, soil moist, loose. |
| April 15 | 5         | 1.57         | 12       | 1:08PM       | 185                | 2.00            | 2.64                        | 1.68                         | 1.22                         | 60      | 1:57PM 1:34PM 2:04PM |               |                 |              | 0.68    | 2:32                            | 0.110                     | Oats 21-30", good; soil wet, firm.                                     |
| April 17 | 3         | 7.936        | 19       |              |                    | 0.02            |                             |                              |                              | 66      | NRO                  |               |                 |              |         |                                 |                           |                                                                        |
| April 17 | 4         | 5.747        | 10       |              |                    | 0.03            |                             |                              |                              | 66      | NRO                  |               |                 |              |         |                                 |                           |                                                                        |
| April 17 | 5         | 1.57         | 12       |              |                    | 0.03            |                             |                              |                              | 66      | NRO                  |               |                 |              |         |                                 |                           |                                                                        |
| April 21 | 3         | 7.936        | 19       |              |                    | 0.01            |                             |                              |                              | 63      | NRO                  |               |                 |              |         |                                 |                           |                                                                        |
| April 21 | 4         | 5.747        | 10       |              |                    | 0.01            |                             |                              |                              | 63      | NRO                  |               |                 |              |         |                                 |                           |                                                                        |
| April 21 | 5         | 1.57         | 12       |              |                    | 0.01            |                             |                              |                              | 63      | NRO                  |               |                 |              |         |                                 |                           |                                                                        |
| April 26 | 3         | 7.936        | 19       |              |                    | 0.12            |                             |                              |                              | 65      | NRO                  |               |                 |              |         |                                 |                           |                                                                        |
| April 26 | 4         | 5.747        | 10       |              |                    | 0.15            |                             |                              |                              | 65      | NRO                  |               |                 |              |         |                                 |                           |                                                                        |
| April 26 | 5         | 1.57         | 12       |              |                    | 0.20            |                             |                              |                              | 65      | NRO                  |               |                 |              |         |                                 |                           |                                                                        |
| April 28 | 3         | 7.936        | 19       |              |                    | 0.15            |                             |                              |                              | 67      | NRO                  |               |                 |              |         |                                 |                           |                                                                        |
| April 28 | 4         | 5.747        | 10       |              |                    | 0.18            |                             |                              |                              | 67      | NRO                  |               |                 |              |         |                                 |                           |                                                                        |
| April 28 | 5         | 1.57         | 12       |              |                    | 0.22            |                             |                              |                              | 67      | NRO                  |               |                 |              |         |                                 |                           |                                                                        |

1/ April 6, 1936  
3/ April 6, 1936  
4/ April 6, 1936  
2/ April 16, 1936

1/ April 6, 1938

2/ April 6, 1938

3/ April 6, 1938

2/ April 16, 1938

4/ April 16, 1938

10/10/10

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
DIVISION OF RESEARCH

MONTH May 19 30  
SHEET 6 OF 13 SHEETS

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

Project Soil Experiment Station, Tex-22  
Taylor, Texas

| Date   | WATERSHED |              | RAINFALL  |              |                    |                 |                             |                              | TEMPERATURE (deg. F.)        |         |         | HUR-OFF      |                |                 |              | Run Loss (tons per acre) | Comments or Watershed                      |      |
|--------|-----------|--------------|-----------|--------------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|---------|---------|--------------|----------------|-----------------|--------------|--------------------------|--------------------------------------------|------|
|        | Number    | Area (acres) | Elev. No. | Begin (hour) | Duration (minutes) | Amount (inches) | MAXIMUM INTENSITY           |                              |                              | Maximum | Minimum | Begin (hour) | Flooded (hour) | Amount (inches) | MAXIMUM RATE |                          |                                            |      |
|        |           |              |           |              |                    |                 | 3 minutes (inches per hour) | 15 minutes (inches per hour) | 30 minutes (inches per hour) |         |         |              |                |                 | Per ft. sec. |                          |                                            | Time |
| (1)    | (2)       | (3)          | (4)       | (5)          | (6)                | (7)             | (8)                         | (9)                          | (10)                         | (11)    | (12)    | (13)         | (14)           | (15)            | (16)         | (17)                     | (18)                                       |      |
| May 4  | 3         | 7.936        | 19        |              |                    | 0.04            |                             |                              |                              | 68      | 68      | NRO          |                |                 |              |                          | Oaks in full leaf; fair cover              |      |
| May 4  | 4         | 5.717        | 10        |              |                    | 0.05            |                             |                              |                              | 68      | 68      | NRO          |                |                 |              |                          | leaves & underbrush; soil moist.           |      |
| May 4  | 5         | 1.57         | 12        |              |                    | 0.03            |                             |                              |                              | 68      | 68      | NRO          |                |                 |              |                          | Recently disced; soil moist, loose         |      |
| May 7  | 3         | 7.936        | 19        |              |                    | 0.50            |                             |                              |                              | 62      | 62      | NRO          |                |                 |              |                          | " plowed; Ditto                            |      |
| May 7  | 4         | 5.717        | 10        |              |                    | 0.50            |                             |                              |                              | 62      | 62      | NRO          |                |                 |              |                          | Oaks in full leaf; fair cover              |      |
| May 7  | 5         | 1.57         | 12        |              |                    | 0.52            |                             |                              |                              | 62      | 62      | NRO          |                |                 |              |                          | leaves & underbrush; soil moist.           |      |
| May 13 | 3         | 7.936        | 19        |              |                    | 0.49            |                             |                              |                              | 62      | 62      | NRO          |                |                 |              |                          | Recently disced; soil moist, open          |      |
| May 13 | 4         | 5.717        | 10        |              |                    | 0.49            |                             |                              |                              | 62      | 62      | NRO          |                |                 |              |                          | Recently planted; soil moist, loose        |      |
| May 13 | 5         | 1.57         | 12        |              |                    | 0.50            |                             |                              |                              | 62      | 62      | NRO          |                |                 |              |                          | Oaks in full leaf; fair cover              |      |
| May 17 | 3         | 7.936        | 19        |              |                    | 0.26            |                             |                              |                              | 68      | 68      | NRO          |                |                 |              |                          | leaves & underbrush; soil moist.           |      |
| May 17 | 4         | 5.717        | 10        |              |                    | 0.22            |                             |                              |                              | 68      | 68      | NRO          |                |                 |              |                          | Settled after disceding; firm.             |      |
| May 17 | 5         | 1.57         | 12        |              |                    | 0.24            |                             |                              |                              | 68      | 68      | NRO          |                |                 |              |                          | Cotton emerging; soil moist, loose         |      |
| May 23 | 3         | 7.936        | 19        |              |                    | 0.54            |                             |                              |                              | 66      | 66      | NRO          |                |                 |              |                          | Oaks in full leaf; fair cover              |      |
| May 23 | 4         | 5.717        | 10        |              |                    | 0.55            |                             |                              |                              | 66      | 66      | NRO          |                |                 |              |                          | leaves & underbrush; soil moist; 8 1/2 ft. |      |
| May 23 | 5         | 1.57         | 12        |              |                    | 0.52            |                             |                              |                              | 66      | 66      | NRO          |                |                 |              |                          | Settled after disceding; 8 1/2 ft.         |      |
|        |           |              |           |              |                    |                 |                             |                              |                              |         |         |              |                |                 |              |                          | Cotton very poor; soil moist, open         |      |
|        |           |              |           |              |                    |                 |                             |                              |                              |         |         |              |                |                 |              |                          | Oat stubble 8"; soil moist, firm           |      |

1573



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH June 1938  
 SHEET 7 OF 13 PAGES

 Project SCS Experiment Station, Taylor, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date    | WATERSHED |              | RAINFALL |              |                    |                 |                             |                              |                              |             |                |                 | TEMPERATURES (degrees F.) |         |         |         | Run-off        |                 |              |        | Rainfall More (inches) | Area Loss (acre per acre) | CONDITION OF WATERSHED |                                                                                      |                                                                                      |
|---------|-----------|--------------|----------|--------------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|-------------|----------------|-----------------|---------------------------|---------|---------|---------|----------------|-----------------|--------------|--------|------------------------|---------------------------|------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|         | Number    | Area (acres) | Days No. | Begin (hour) | Duration (minutes) | Amount (inches) | MAXIMUM INTENSITY           |                              |                              | Peak (hour) | Flood (inches) | Amount (inches) | MAXIMUM RATE              |         | Minimum | Maximum | Flood (inches) | Amount (inches) | Cu. ft. sec. | Time   |                        |                           |                        |                                                                                      |                                                                                      |
|         |           |              |          |              |                    |                 | 8 minutes (inches per hour) | 16 minutes (inches per hour) | 30 minutes (inches per hour) |             |                |                 | (16)                      | (17)    |         |         |                |                 |              |        |                        |                           |                        |                                                                                      |                                                                                      |
| June 1  | 3         | 7.936        | 19       | 5:17AM       | 60                 | 1.59            | 5.22                        | 4.03                         | 2.36                         | 5:26AM      | 5:26AM         | 0.003           | No Rate                   | No Rate | 65      | 87      | 5:26AM         | 0.003           | 5:31AM       | 1.597  | 1.597                  | 0.005                     | 10                     | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |                                                                                      |
| June 1  | 4         | 5.747        | 10       | 5:17AM       | 4/                 | 1.51            | 4/                          | 4/                           | 4/                           | 5:26AM      | 5:26AM         | 0.2445          | 10.61                     | 5:31AM  | 65      | 87      | 5:26AM         | 0.2445          | 5:31AM       | 1.516  | 1.516                  | 5.111                     | 10                     | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |                                                                                      |
| June 1  | 5         | 1.57         | 12       | 5:17AM       | 60                 | 1.42            | 4.56                        | 3.44                         | 2.38                         | 5:26AM      | 5:26AM         | 0.1165          | 0.51                      | 5:31AM  | 65      | 87      | 5:26AM         | 0.1165          | 5:31AM       | 1.5274 | 1.5274                 | 0.177                     | 10                     | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |                                                                                      |
| June 8  | 3         | 7.936        | 19       |              |                    | 0.03            |                             |                              |                              |             |                |                 |                           |         | 74      | 74      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 8  | 4         | 5.747        | 10       |              |                    | 0.02            |                             |                              |                              |             |                |                 |                           |         | 74      | 74      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 8  | 5         | 1.57         | 12       |              |                    | 0.04            |                             |                              |                              |             |                |                 |                           |         | 74      | 74      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 10 | 3         | 7.936        | 19       |              |                    | 0.13            |                             |                              |                              |             |                |                 |                           |         | 86      | 86      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 10 | 4         | 5.747        | 10       |              |                    | 0.12            |                             |                              |                              |             |                |                 |                           |         | 86      | 86      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 10 | 5         | 1.57         | 12       |              |                    | 0.08            |                             |                              |                              |             |                |                 |                           |         | 86      | 86      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 11 | 3         | 7.936        | 19       |              |                    | 0.35            |                             |                              |                              |             |                |                 |                           |         | 86      | 86      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 11 | 4         | 5.747        | 10       |              |                    | 0.28            |                             |                              |                              |             |                |                 |                           |         | 86      | 86      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 11 | 5         | 1.57         | 12       |              |                    | 0.22            |                             |                              |                              |             |                |                 |                           |         | 86      | 86      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 17 | 3         | 7.936        | 19       |              |                    | 0.10            | 0.12                        | 0.08                         | 0.06                         |             |                | 0.08            |                           |         | 78      | 78      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 17 | 4         | 5.747        | 10       |              |                    | 0.10            | 0.12                        | 0.08                         | 0.06                         |             |                | 0.08            |                           |         | 78      | 78      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 17 | 5         | 1.57         | 12       |              |                    | 0.09            | 0.12                        | 0.08                         | 0.06                         |             |                | 0.08            |                           |         | 78      | 78      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 17 | 3         | 7.936        | 19       | 3:22PM       | 10                 | 0.17            | 1.14                        | 0.68                         | 0.24                         |             |                | 0.68            |                           |         | 78      | 78      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 17 | 3         | 7.936        | 19       | 6:20AM       | 180                | 0.57            | 0.96                        | 0.60                         | 0.24                         |             |                | 0.60            |                           |         | 78      | 78      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 17 | 3         | 7.936        | 19       | 10:35AM      | 70                 | 0.51            | 1.08                        | 0.92                         | 0.54                         |             |                | 0.92            |                           |         | 78      | 78      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 17 | 4         | 5.747        | 10       | Total        |                    | 1.25            | 1.80                        | 0.76                         | 0.38                         |             |                | 0.76            |                           |         | 78      | 78      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 17 | 4         | 5.747        | 10       |              |                    | 0.61            | 1.80                        | 1.00                         | 0.52                         |             |                | 1.00            |                           |         | 78      | 78      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 17 | 4         | 5.747        | 10       |              |                    | 0.55            | 1.20                        | 0.96                         | 0.54                         |             |                | 0.96            |                           |         | 78      | 78      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 17 | 4         | 5.747        | 10       | Total        |                    | 1.35            | 1.80                        | 0.96                         | 0.54                         |             |                | 0.96            |                           |         | 78      | 78      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 17 | 5         | 1.57         | 12       |              |                    | 0.15            | 0.06                        | 0.60                         | 0.30                         |             |                | 0.60            |                           |         | 78      | 78      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 17 | 5         | 1.57         | 12       |              |                    | 0.94            | 3.12                        | 2.12                         | 1.08                         |             |                | 2.12            |                           |         | 78      | 78      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 17 | 5         | 1.57         | 12       | Total        |                    | 1.62            | 0.72                        | 0.60                         | 0.54                         |             |                | 0.60            |                           |         | 78      | 78      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 18 | 3         | 7.936        | 19       |              |                    | 0.02            |                             |                              |                              |             |                |                 |                           |         | 70      | 70      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 18 | 4         | 5.747        | 10       |              |                    | 0.03            |                             |                              |                              |             |                |                 |                           |         | 70      | 70      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 18 | 5         | 1.57         | 12       |              |                    | 0.04            |                             |                              |                              |             |                |                 |                           |         | 70      | 70      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 29 | 3         | 7.936        | 19       |              |                    | 0.05            |                             |                              |                              |             |                |                 |                           |         | 71      | 71      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 29 | 4         | 5.747        | 10       |              |                    | 0.05            |                             |                              |                              |             |                |                 |                           |         | 71      | 71      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |
| June 29 | 5         | 1.57         | 12       |              |                    | 0.05            |                             |                              |                              |             |                |                 |                           |         | 71      | 71      |                |                 |              |        |                        |                           |                        | 10                                                                                   | Oaks in full leaf, fair cover of underbrush, soil moist, loose. Oak stubble 8" soil. |

1/4 Duration & intensities lost.

Duration &amp; intensities lost.

107-11

Project SCS Experiment Station, Tex-R2,  
Tyler, Texas

# RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date    | Weathered |              | Rainfall |                 |                 |                             |                              | Temperature (degrees F.)     |         |         | Humidity    |                 |              |      | Rainfall Meters (inches) | Dry Leaf (once per acre) | Condition of Watershed                                                                                   |
|---------|-----------|--------------|----------|-----------------|-----------------|-----------------------------|------------------------------|------------------------------|---------|---------|-------------|-----------------|--------------|------|--------------------------|--------------------------|----------------------------------------------------------------------------------------------------------|
|         | Number    | Area (acres) | Days %   | Hours (minutes) | Amount (inches) | Maximum Intensity           |                              |                              | Maximum | Minimum | Mean (hour) | Amount (inches) | Maximum Rate |      |                          |                          |                                                                                                          |
|         |           |              |          |                 |                 | 8 minutes (inches per hour) | 16 minutes (inches per hour) | 30 minutes (inches per hour) |         |         |             |                 | Cu ft. sec.  | Time |                          |                          |                                                                                                          |
| (11)    |           |              | (4)      | (5)             | (6)             | (7)                         | (8)                          | (9)                          | (10)    | (11)    | (12)        | (13)            | (14)         | (15) | (16)                     | (17)                     | (18)                                                                                                     |
| July 9  | 3         | 7.936        | 19       |                 |                 | 0.08                        |                              |                              | 93      | 70      | NRO         |                 |              |      |                          |                          | Oaks in full leaf, brush soil dry, Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm. |
| July 9  | 4         | 5.747        | 10       |                 |                 | 0.08                        |                              |                              | 93      | 70      | NRO         |                 |              |      |                          |                          | Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm.                                    |
| July 9  | 5         | 1.57         | 12       |                 |                 | 0.03                        |                              |                              | 93      | 70      | NRO         |                 |              |      |                          |                          | Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm.                                    |
| July 15 | 3         | 7.936        | 19       |                 |                 | 0.01                        |                              |                              | 99      | 76      | NRO         |                 |              |      |                          |                          | Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm.                                    |
| July 15 | 4         | 5.747        | 10       |                 |                 | 0.01                        |                              |                              | 99      | 76      | NRO         |                 |              |      |                          |                          | Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm.                                    |
| July 15 | 5         | 1.57         | 12       |                 |                 | 0.02                        |                              |                              | 99      | 76      | NRO         |                 |              |      |                          |                          | Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm.                                    |
| July 17 | 3         | 7.936        | 19       |                 |                 | 0.07                        |                              |                              | 94      | 74      | NRO         |                 |              |      |                          |                          | Oaks in full leaf, brush soil dry, Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm. |
| July 17 | 4         | 5.747        | 10       |                 |                 | 0.05                        |                              |                              | 94      | 74      | NRO         |                 |              |      |                          |                          | Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm.                                    |
| July 17 | 5         | 1.57         | 12       |                 |                 | 0.07                        |                              |                              | 94      | 74      | NRO         |                 |              |      |                          |                          | Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm.                                    |
| July 18 | 3         | 7.936        | 19       |                 |                 | 0.02                        |                              |                              | 90      | 72      | NRO         |                 |              |      |                          |                          | Oaks in full leaf, brush soil dry, Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm. |
| July 18 | 4         | 5.747        | 10       |                 |                 | 0.02                        |                              |                              | 90      | 72      | NRO         |                 |              |      |                          |                          | Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm.                                    |
| July 18 | 5         | 1.57         | 12       |                 |                 | 0.01                        |                              |                              | 90      | 72      | NRO         |                 |              |      |                          |                          | Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm.                                    |
| July 20 | 3         | 7.936        | 19       |                 |                 | 0.05                        |                              |                              | 95      | 72      | NRO         |                 |              |      |                          |                          | Oaks in full leaf, brush soil dry, Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm. |
| July 20 | 4         | 5.747        | 10       |                 |                 | 0.04                        |                              |                              | 95      | 72      | NRO         |                 |              |      |                          |                          | Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm.                                    |
| July 20 | 5         | 1.57         | 12       |                 |                 | 0.05                        |                              |                              | 95      | 72      | NRO         |                 |              |      |                          |                          | Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm.                                    |
| July 21 | 3         | 7.936        | 19       |                 |                 | 0.05                        |                              |                              | 83      | 70      | NRO         |                 |              |      |                          |                          | Oaks in full leaf, brush soil dry, Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm. |
| July 21 | 4         | 5.747        | 10       |                 |                 | 0.05                        |                              |                              | 83      | 70      | NRO         |                 |              |      |                          |                          | Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm.                                    |
| July 21 | 5         | 1.57         | 12       |                 |                 | 0.05                        |                              |                              | 83      | 70      | NRO         |                 |              |      |                          |                          | Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm.                                    |
| July 29 | 3         | 7.936        | 19       |                 |                 | 0.02                        |                              |                              | 95      | 73      | NRO         |                 |              |      |                          |                          | Oaks in full leaf, brush soil dry, Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm. |
| July 29 | 4         | 5.747        | 10       |                 |                 | 0.04                        |                              |                              | 95      | 73      | NRO         |                 |              |      |                          |                          | Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm.                                    |
| July 29 | 5         | 1.57         | 12       |                 |                 | 0.02                        |                              |                              | 95      | 73      | NRO         |                 |              |      |                          |                          | Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm.                                    |
| July 30 | 3         | 7.936        | 19       |                 |                 | 0.13                        |                              |                              | 82      | 70      | NRO         |                 |              |      |                          |                          | Oaks in full leaf, brush soil dry, Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm. |
| July 30 | 4         | 5.747        | 10       |                 |                 | 0.11                        |                              |                              | 82      | 70      | NRO         |                 |              |      |                          |                          | Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm.                                    |
| July 30 | 5         | 1.57         | 12       |                 |                 | 0.12                        |                              |                              | 82      | 70      | NRO         |                 |              |      |                          |                          | Cowpeas, fair stand, 11-18" high, Cotton 12-14", fair soil dry, firm.                                    |

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UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH August , 19 38  
 SHEET 9 OF 13 SHEETS

## RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

Project SC8 Experiment Station, Tex-82,Date June

| Date    | WATERSHED |                 | RAINFALL |                 |                       |                    |                                  |                                 | TEMPERATURES<br>(Degree F.)     |                     |                     | RUSCH            |                    |              |        | Run Loss<br>(tons per acre) | RAINFALL MEASURE<br>(inches)                                                   | Remarks |
|---------|-----------|-----------------|----------|-----------------|-----------------------|--------------------|----------------------------------|---------------------------------|---------------------------------|---------------------|---------------------|------------------|--------------------|--------------|--------|-----------------------------|--------------------------------------------------------------------------------|---------|
|         | Number    | Area<br>(acres) | Gage No. | Begin<br>(hour) | Duration<br>(minutes) | Amount<br>(inches) | MAXIMUM INTENSITY                |                                 |                                 | Maximum<br>(inches) | Minimum<br>(inches) | Foggy<br>(hours) | Amount<br>(inches) | MAXIMUM RATE |        |                             |                                                                                |         |
|         |           |                 |          |                 |                       |                    | 1st maximum<br>(inches per hour) | 2d maximum<br>(inches per hour) | 3d maximum<br>(inches per hour) |                     |                     |                  |                    | On ft sec    | Time   |                             |                                                                                |         |
| (1)     | (2)       | (3)             | (4)      | (5)             | (6)                   | (7)                | (8)                              | (9)                             | (10)                            | (11)                | (12)                | (13)             | (14)               | (15)         | (16)   | (17)                        | (18)                                                                           |         |
| Aug. 9  | 3         | 7.936           | 19       | 12:51PM         | 25                    | 0.01               | 5.16                             | 3.92                            | 2.24                            | 74                  | 74                  | ERO              | 0.001              | No data      |        |                             | Oaks in full leaf, good cover                                                  |         |
| Aug. 9  | 4         | 5.747           | 10       | 12:51PM         | 27                    | 0.01               | 4.92                             | 3.92                            | 2.34                            | 74                  | 74                  | ERO              | 0.171              | 4.81         | 1:11PM | 0.949                       | Corn, dry, fair soil, dry, firm.                                               |         |
| Aug. 9  | 5         | 1.57            | 12       | 12:51PM         | 31                    | 0.01               | 5.76                             | 4.16                            | 2.34                            | 74                  | 74                  | ERO              | 0.064              | No data      |        | 1.216                       | Cotton 2 1/2", fair soil, dry, firm.<br>Stubble previously mowed to 1/2", dry. |         |
| Aug. 10 | 3         | 7.936           | 19       | 12:51PM         | 25                    | 1.05               | 4.92                             | 3.12                            | 2.70                            | 72                  | 72                  | Silt box         | 0.003              | No data      |        | 1.497                       | Oaks in full leaf, good cover                                                  |         |
| Aug. 10 | 4         | 5.747           | 10       | 12:51PM         | 27                    | 1.12               | 5.04                             | 3.20                            | 2.70                            | 72                  | 72                  | 2:49PM           | 0.951              | 11.73        | 3:01PM | 0.969                       | Corn, dry, fair soil, dry, firm.                                               |         |
| Aug. 10 | 5         | 1.57            | 12       | 12:51PM         | 31                    | 1.28               | 2.64                             | 2.20                            | 1.76                            | 72                  | 72                  | 2:56PM           | 0.977              | 0.46         | 3:17PM | 1.073                       | Cotton 2 1/2", fair soil, moist, firm.<br>Cut stubble 1/2", soil dry, firm.    |         |
| Aug. 12 | 3         | 7.936           | 19       | 2:35PM          | 52                    | 1.50               | 4.92                             | 3.12                            | 2.70                            | 73                  | 73                  | Silt box         | 0.003              | No data      |        | 1.497                       | Oaks in full leaf, good cover                                                  |         |
| Aug. 12 | 4         | 5.747           | 10       | 2:35PM          | 52                    | 1.52               | 5.04                             | 3.20                            | 2.70                            | 73                  | 73                  | 2:49PM           | 0.951              | 11.73        | 3:01PM | 0.969                       | Corn, dry, fair soil, dry, firm.                                               |         |
| Aug. 12 | 5         | 1.57            | 12       | 2:35PM          | 55                    | 1.17               | 2.64                             | 2.20                            | 1.76                            | 73                  | 73                  | 2:56PM           | 0.977              | 0.46         | 3:17PM | 1.073                       | Cotton 2 1/2", fair soil, moist, firm.<br>Cut stubble 1/2", soil moist, firm.  |         |
| Aug. 14 | 3         | 7.936           | 19       |                 |                       | 0.01               |                                  |                                 |                                 | 88                  | 88                  | ERO              |                    |              |        |                             | Oaks in full leaf, good cover                                                  |         |
| Aug. 14 | 4         | 5.747           | 10       |                 |                       | 0.01               |                                  |                                 |                                 | 88                  | 88                  | ERO              |                    |              |        |                             | Corn, dry, fair soil, dry, firm.                                               |         |
| Aug. 14 | 5         | 1.57            | 12       |                 |                       | 0.02               |                                  |                                 |                                 | 88                  | 88                  | ERO              |                    |              |        |                             | Cotton 2 1/2", fair soil, moist, firm.<br>Cut stubble 1/2", soil moist, firm.  |         |





1992-1993

UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH September, 1938  
 SHEET 10 OF 13 SHEETS

 PROJECT SCS Experiment Station, Tex-ES,  
Taylor, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| DATE     | WATERSHED |              | RAINFALL        |                    |                 |                   |                | TEMPERATURE (Fahrenheit) |         |         | RUN OFF      |              |                 |                | HAZARD INDEX (inches) | RST Loss (tons per acre) | CONTINUM OF WATERSHED                                                                                                                                                   |      |
|----------|-----------|--------------|-----------------|--------------------|-----------------|-------------------|----------------|--------------------------|---------|---------|--------------|--------------|-----------------|----------------|-----------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
|          | Number    | Area (acres) | Height (inches) | Duration (minutes) | Amount (inches) | MAXIMUM INTENSITY |                |                          | Maximum | Minimum | Begin (hour) | Flood (hour) | Amount (inches) | Cubic ft. sec. |                       |                          |                                                                                                                                                                         | Time |
|          |           |              |                 |                    |                 | 1 in. (hour)      | 1/2 in. (hour) | 1/4 in. (hour)           |         |         |              |              |                 |                |                       |                          |                                                                                                                                                                         |      |
| Sept. 11 | 3         | 7.936        | 19              |                    | 0.30            |                   |                |                          | 61      | 72      | NRO          | 13           | 144             | 145            | 140                   | (18)                     | Oaks in fall leaf, fair over un-<br>derbrush, soil dry.<br>Voluntary, covering grass 3-4".<br>Cotton 2 1/2", fair, soil dry, firm.<br>Recently plowed, soil dry, loose. |      |
| Sept. 11 | 4         | 5.747        | 10              |                    | 0.32            |                   |                | 61                       | 72      | NRO     |              |              |                 |                |                       |                          |                                                                                                                                                                         |      |
| Sept. 11 | 5         | 1.57         | 12              |                    | 0.32            |                   |                | 61                       | 72      | NRO     |              |              |                 |                |                       |                          |                                                                                                                                                                         |      |
| Sept. 14 | 3         | 7.936        | 19              | 4:12AM             | 0.39            |                   |                |                          | 91      | 71      | NRO          |              |                 |                |                       |                          | Oaks in fall leaf, fair over<br>underbrush, soil dry.<br>Voluntary, covering grass 3-4".<br>Cotton 2 1/2", fair, soil dry, firm.<br>Recently plowed, soil dry, loose.   |      |
| Sept. 14 | 4         | 5.747        | 10              | 4:12AM             | 0.39            | 1.28              | 0.78           | 91                       | 71      | NRO     |              |              |                 |                |                       |                          |                                                                                                                                                                         |      |
| Sept. 14 | 5         | 1.57         | 12              | 4:15AM             | 0.36            | 1.36              | 0.72           | 91                       | 71      | NRO     |              |              |                 |                |                       |                          |                                                                                                                                                                         |      |

1180

Project PCS Experimental Station, Tar-P2

# RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date    | WATERED |                 | BLIZZARD  |                  |                       |                    |                               |                                |                                | TEMPERATURES<br>(degrees F.) |         | RUM-OUT         |                      |                    |              |      | HAIRFALL MINUS<br>RUM-OUT<br>(inches) | Bare Loom<br>(long per acre) | CONDITION OF WATERED |
|---------|---------|-----------------|-----------|------------------|-----------------------|--------------------|-------------------------------|--------------------------------|--------------------------------|------------------------------|---------|-----------------|----------------------|--------------------|--------------|------|---------------------------------------|------------------------------|----------------------|
|         | Number  | Area<br>(acres) | (tag No.) | Pounds<br>(bush) | Duration<br>(minutes) | Amount<br>(bushes) | MAXIMUM FERTILITY             |                                |                                | Maximum                      | Minimum | Began<br>(bush) | Fertilized<br>(bush) | Amount<br>(bushes) | MAXIMUM RATE |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    | 5 min/lb<br>(bushes per bush) | 10 min/lb<br>(bushes per bush) | 20 min/lb<br>(bushes per bush) |                              |         |                 |                      |                    | On ft. sec.  | Time |                                       |                              |                      |
| (1)     | (2)     | (3)             | (4)       | (5)              | (6)                   | (7)                | (8)                           | (9)                            | (10)                           | (11)                         | (12)    | (13)            | (14)                 | (15)               | (16)         | (17) | (18)                                  |                              |                      |
| Oct. 17 | 3       | 7.936           | 19        |                  |                       | 0.22               |                               |                                |                                | 95                           | 64      | NRO             |                      |                    |              | (18) |                                       |                              |                      |
| Oct. 17 | 4       | 5.747           | 10        |                  |                       | 0.21               |                               |                                |                                | 85                           | 64      | NRO             |                      |                    |              |      |                                       |                              |                      |
| Oct. 17 | 5       | 1.57            | 12        |                  |                       | 0.22               |                               |                                |                                | 85                           | 64      | NRO             |                      |                    |              |      |                                       |                              |                      |
| Oct. 22 | 3       | 7.936           | 19        |                  |                       | 0.21               |                               |                                |                                | 81                           | 50      | NRO             |                      |                    |              |      |                                       |                              |                      |
| Oct. 22 | 4       | 5.747           | 10        |                  |                       | 0.23               |                               |                                |                                | 81                           | 50      | NRO             |                      |                    |              |      |                                       |                              |                      |
| Oct. 22 | 5       | 1.57            | 12        |                  |                       | 0.25               |                               |                                |                                | 81                           | 50      | NRO             |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       |                    |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |
|         |         |                 |           |                  |                       | </                 |                               |                                |                                |                              |         |                 |                      |                    |              |      |                                       |                              |                      |



1000-1000



RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

tion, Tex-R2,  
Tyler, Texas

| Date   | Weathered |              | Rainfall |              |                    |                 |                             |                              | Temperatures (degrees F)     |         |              | Run off        |                 |              |         | Rainfall minus (inches) | Rise Low (tons per acre) | Common or Weeds                                              |
|--------|-----------|--------------|----------|--------------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|---------|--------------|----------------|-----------------|--------------|---------|-------------------------|--------------------------|--------------------------------------------------------------|
|        | Number    | Area (acres) | Days %   | Begin (hour) | Duration (minutes) | Amount (inches) | Maximum Intensity           |                              |                              | Minimum | Begin (hour) | Furrow (hour)  | Amount (inches) | Maximum Rate |         |                         |                          |                                                              |
|        |           |              |          |              |                    |                 | 5 minutes (inches per hour) | 10 minutes (inches per hour) | 30 minutes (inches per hour) |         |              |                |                 | Cu ft. per   | Time    |                         |                          |                                                              |
| (1)    | (2)       | (3)          | (4)      | (5)          | (6)                | (7)             | (8)                         | (9)                          | (10)                         | (11)    | (12)         | (13)           | (14)            | (15)         | (16)    | (17)                    | (18)                     | (19)                                                         |
| Nov. 3 | 3         | 7.936        | 19       | 8:18AM       | 12                 | 0.45            | 3.72                        | 1.60                         | 0.88                         | 78      | 53           | NRO            |                 |              |         |                         |                          | Oaks partially dormant, fair ground over leaves, soil moist. |
| Nov. 3 | 3         | 7.936        | 19       | 10:58AM      | 501                | 2.22            | 3.12                        | 1.40                         | 0.86                         | 78      | 53           | NRO            |                 |              |         |                         | None                     |                                                              |
| Nov. 3 | 4         | 5.717        | 10       | 8:13AM       | 12                 | 0.48            | 3.84                        | 1.68                         | 0.94                         | 78      | 53           |                |                 |              | 9.01    | 12:07                   |                          | Oaks good stand, 1" high, soil dry open                      |
| Nov. 3 | 4         | 5.717        | 10       | 10:52AM      | 505                | 1.82            | 3.12                        | 1.48                         | 0.92                         | 78      | 53           | 11:45AM 1:51AM | 0.219           |              |         | 2.081                   | 1.481                    | Ditto                                                        |
| Nov. 3 | 5         | 1.57         | 12       | 8:45AM       | 19                 | 0.45            | 3.36                        | 1.52                         | 0.90                         | 78      | 53           |                |                 |              |         |                         |                          | Oaks 1" fair, soil dry. open                                 |
| Nov. 3 | 5         | 1.57         | 12       | 10:53AM      | 500                | 2.00            | 3.60                        | 1.68                         | 1.08                         | 78      | 53           | Silt Box       | 0.015           | No Rate      |         | 2.435                   | 0.013                    | Bare, soil dry, firm                                         |
| Nov. 3 |           |              |          | Total        |                    | 2.45            |                             |                              |                              |         |              |                |                 |              |         |                         |                          |                                                              |
| Nov. 6 | 3         | 7.936        | 19       | 12:21PM      | 54                 | 0.63            | 1.08                        | 2.00                         | 1.08                         | 72      | 50           |                |                 |              |         |                         |                          | Oaks partially dormant, fair ground over leaves, soil moist. |
| Nov. 6 | 3         | 7.936        | 19       | 2:20PM       | 245                | 0.54            | 0.48                        | 0.40                         | 0.24                         | 72      | 50           |                |                 |              |         |                         |                          | Ditto                                                        |
| Nov. 6 | 3         | 7.936        | 19       | 8:37PM       | 22                 | 0.03            | 0.24                        | 0.08                         | 0.06                         | 72      | 50           |                |                 |              |         |                         |                          | Ditto                                                        |
| Nov. 6 | 3         | 7.936        | 19       | 10:13PM      | 202                | 0.44            | 0.48                        | 0.32                         | 0.30                         | 72      | 50           |                |                 |              |         |                         |                          | Ditto                                                        |
| Nov. 7 | 3         | 7.936        | 19       | 3:05AM       | 110                | 0.09            | 0.36                        | 0.16                         | 0.12                         | 51      | 35           |                |                 |              |         |                         |                          |                                                              |
| Nov. 7 |           |              |          | Total        |                    | 1.73            |                             |                              |                              |         |              | Silt Box       | 0.001           | No Rate      |         | 1.729                   | None                     |                                                              |
| Nov. 6 | 4         | 5.717        | 10       | 12:16PM      | 60                 | 0.65            | 3.60                        | 2.12                         | 1.16                         | 72      | 50           | 12:32PM 6:05AM |                 |              |         |                         |                          | Oaks good stand, 1" high, soil wet                           |
| Nov. 6 | 4         | 5.717        | 10       | 2:10PM       | 233                | 0.53            | 0.60                        | 0.20                         | 0.26                         | 72      | 50           |                |                 |              |         |                         |                          | Ditto                                                        |
| Nov. 6 | 4         | 5.717        | 10       | 7:55PM       | 75                 | 0.05            | 0.08                        | 0.08                         | 0.05                         | 72      | 50           |                |                 |              |         |                         |                          | Ditto                                                        |
| Nov. 6 | 4         | 5.717        | 10       | 10:13PM      | 200                | 0.47            | 0.39                        | 0.32                         | 0.30                         | 72      | 50           |                |                 |              |         |                         |                          | Oaks good stand, saturated, firm                             |
| Nov. 7 | 4         | 5.717        | 10       | 3:06AM       | 115                | 0.09            | 0.24                        | 0.20                         | 0.12                         | 51      | 35           |                |                 |              |         |                         |                          | Ditto                                                        |
| Nov. 7 |           |              |          | Total        |                    | 1.79            |                             |                              |                              |         |              |                | 0.463           | 12.89        | 12:11PM | 1.327                   | 1.505                    | Oaks 1" fair, soil wet firm, bare                            |
| Nov. 6 | 5         | 1.57         | 12       | 12:16PM      | 57                 | 0.66            | 3.48                        | 2.12                         | 1.14                         | 72      | 50           |                |                 |              |         |                         |                          | Ditto                                                        |
| Nov. 6 | 5         | 1.57         | 12       | 2:20PM       | 240                | 0.66            | 1.32                        | 0.60                         | 0.30                         | 72      | 50           |                |                 |              |         |                         |                          | Ditto                                                        |
| Nov. 6 | 5         | 1.57         | 12       | 8:15PM       | 30                 | 0.03            | 0.08                        | 0.08                         | 0.06                         | 72      | 50           |                |                 |              |         |                         |                          | Oaks 1" fair, soil saturated, firm, bare - saturated, firm.  |
| Nov. 6 | 5         | 1.57         | 12       | 10:13PM      | 195                | 0.48            | 0.48                        | 0.10                         | 0.32                         | 72      | 50           |                |                 |              |         |                         |                          | Ditto                                                        |
| Nov. 7 | 5         | 1.57         | 12       | 3:05PM       | 120                | 0.11            | 0.24                        | 0.16                         | 0.12                         | 51      | 35           |                |                 |              |         |                         |                          |                                                              |
| Nov. 7 |           |              |          | Total        |                    | 1.95            |                             |                              |                              |         |              | Silt Box       | 0.035           | No Rate      |         | 1.915                   | 0.012                    |                                                              |

1/ Nov. 6, 1938



769/160

Project SCS Experiment Station, Tex-82  
Tyler, Texas

# RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date       | WATERGATE |              | RAINFALL  |               |                    |                 |                             |                              | TEMPERATURES (degrees F)     |                  |                  |                 | HUMIDITY        |              |       |      | RAINFALL MEASURE (inches)                           | WIND (m.p.h.) | SKY (per cent) | CLOUDS (per cent) | WIND DIRECTION | WIND VELOCITY | WIND FORCE | WIND EFFECT |
|------------|-----------|--------------|-----------|---------------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|------------------|------------------|-----------------|-----------------|--------------|-------|------|-----------------------------------------------------|---------------|----------------|-------------------|----------------|---------------|------------|-------------|
|            | Number    | Area (acres) | Stage No. | Height (feet) | Duration (minutes) | Amount (inches) | Maximum Intensity           |                              |                              | Maximum (inches) | Minimum (inches) | Wetted (inches) | Amount (inches) | Maximum Rate |       |      |                                                     |               |                |                   |                |               |            |             |
|            |           |              |           |               |                    |                 | 5 minutes (inches per hour) | 15 minutes (inches per hour) | 30 minutes (inches per hour) |                  |                  |                 |                 | On R. sec.   | Time  |      |                                                     |               |                |                   |                |               |            |             |
| Dec. 2     | 3         | 7.936        | 19        | 4:57 AM       | 18                 | 0.29            | 0.36                        | 0.16                         | 0.10                         | 0.08             | 71               | 62              | NRO             | 0.001        | 2.809 | None | Oats dormant, good ground cover-- leaves, soil dry. |               |                |                   |                |               |            |             |
| Dec. 2     | 4         | 5.717        | 10        | 2:30 PM       | 10                 | 0.28            | 0.24                        | 0.12                         | 0.08                         | 0.06             | 74               | 62              | NRO             | 0.001        | 2.809 | None | Oats, good stand, 2" high; soil moist.              |               |                |                   |                |               |            |             |
| Dec. 2     | 5         | 1.57         | 12        | 5:45 PM       | 10                 | 0.28            | 0.24                        | 0.12                         | 0.08                         | 0.06             | 74               | 62              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, firm.                    |               |                |                   |                |               |            |             |
| Dec. 20    | 3         | 7.936        | 19        | 4:57 AM       | 10                 | 0.03            | 0.24                        | 0.16                         | 0.10                         | 0.08             | 66               | 51              | NRO             | 0.001        | 2.809 | None | Oats dormant, good ground cover.                    |               |                |                   |                |               |            |             |
| Dec. 20    | 4         | 5.717        | 10        | 8:40 AM       | 10                 | 0.04            | 0.24                        | 0.16                         | 0.10                         | 0.08             | 66               | 51              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, dry, firm.                      |               |                |                   |                |               |            |             |
| Dec. 20    | 5         | 1.57         | 12        | 2:30 PM       | 15                 | 0.02            | 0.24                        | 0.16                         | 0.10                         | 0.08             | 66               | 51              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, dry, firm.                      |               |                |                   |                |               |            |             |
| Dec. 22    | 3         | 7.936        | 19        | 4:57 AM       | 18                 | 0.05            | 0.36                        | 0.16                         | 0.10                         | 0.08             | 59               | 44              | NRO             | 0.001        | 2.809 | None | Oats dormant, good ground cover.                    |               |                |                   |                |               |            |             |
| Dec. 22    | 4         | 5.717        | 10        | 2:30 PM       | 10                 | 0.06            | 0.24                        | 0.12                         | 0.08                         | 0.06             | 59               | 44              | NRO             | 0.001        | 2.809 | None | Oats, good stand, 2" high; soil moist.              |               |                |                   |                |               |            |             |
| Dec. 22    | 5         | 1.57         | 12        | 5:45 PM       | 10                 | 0.01            | 0.24                        | 0.12                         | 0.08                         | 0.06             | 59               | 44              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, firm.                    |               |                |                   |                |               |            |             |
| Dec. 22-23 | 3         | 7.936        | 19        | 4:57 AM       | 10                 | 1.87            | 1.68                        | 0.80                         | 0.40                         | 0.30             | 59               | 46              | NRO             | 0.001        | 2.809 | None | Oats dormant, good ground cover.                    |               |                |                   |                |               |            |             |
| Dec. 23    | 3         | 7.936        | 19        | 4:57 AM       | 10                 | 0.16            | 0.24                        | 0.16                         | 0.10                         | 0.08             | 59               | 46              | NRO             | 0.001        | 2.809 | None | Oats dormant, good ground cover.                    |               |                |                   |                |               |            |             |
| Dec. 23    | 4         | 5.717        | 10        | 8:40 AM       | 10                 | 0.01            | 0.24                        | 0.16                         | 0.10                         | 0.08             | 59               | 46              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, dry, firm.                      |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 10                 | 0.63            | 0.36                        | 0.16                         | 0.10                         | 0.08             | 59               | 46              | NRO             | 0.001        | 2.809 | None | Oats dormant, good ground cover.                    |               |                |                   |                |               |            |             |
| Dec. 23    | 4         | 5.717        | 10        | 2:30 PM       | 10                 | 0.02            | 0.24                        | 0.16                         | 0.10                         | 0.08             | 59               | 46              | NRO             | 0.001        | 2.809 | None | Oats, good stand, 2" high; soil moist.              |               |                |                   |                |               |            |             |
| Dec. 23    | 5         | 1.57         | 12        | 5:45 PM       | 10                 | 0.02            | 0.24                        | 0.16                         | 0.10                         | 0.08             | 59               | 46              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, firm.                    |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 10                 | 2.81            | 0.36                        | 0.16                         | 0.10                         | 0.08             | 59               | 46              | NRO             | 0.001        | 2.809 | None | Oats dormant, good ground cover.                    |               |                |                   |                |               |            |             |
| Dec. 23    | 4         | 5.717        | 10        | 2:30 PM       | 10                 | 0.06            | 0.24                        | 0.16                         | 0.10                         | 0.08             | 59               | 46              | NRO             | 0.001        | 2.809 | None | Oats, good stand, 2" high; soil moist.              |               |                |                   |                |               |            |             |
| Dec. 23    | 5         | 1.57         | 12        | 5:45 PM       | 10                 | 0.01            | 0.24                        | 0.16                         | 0.10                         | 0.08             | 59               | 46              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, firm.                    |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 10                 | 1.83            | 1.68                        | 0.80                         | 0.40                         | 0.30             | 59               | 46              | NRO             | 0.001        | 2.809 | None | Oats dormant, good ground cover.                    |               |                |                   |                |               |            |             |
| Dec. 23    | 4         | 5.717        | 10        | 8:40 AM       | 10                 | 0.15            | 0.24                        | 0.16                         | 0.10                         | 0.08             | 59               | 46              | NRO             | 0.001        | 2.809 | None | Oats dormant, good ground cover.                    |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 10                 | 0.01            | 0.24                        | 0.16                         | 0.10                         | 0.08             | 59               | 46              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, dry, firm.                      |               |                |                   |                |               |            |             |
| Dec. 23-24 | 4         | 5.717        | 10        | 2:30 PM       | 10                 | 0.65            | 0.25                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats dormant, good ground cover.                    |               |                |                   |                |               |            |             |
| Dec. 23-24 | 5         | 1.57         | 12        | 5:45 PM       | 15                 | 0.02            | 0.04                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats, good stand, 2" high; soil moist.              |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 15                 | 1.79            | 0.04                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 4         | 5.717        | 10        | 2:30 PM       | 15                 | 0.04            | 0.24                        | 0.16                         | 0.10                         | 0.08             | 59               | 46              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 5         | 1.57         | 12        | 5:45 PM       | 10                 | 0.05            | 0.12                        | 0.08                         | 0.06                         | 0.06             | 59               | 46              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 10                 | 1.88            | 1.20                        | 0.68                         | 0.36                         | 0.20             | 59               | 46              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23    | 4         | 5.717        | 10        | 8:40 AM       | 10                 | 0.13            | 0.36                        | 0.16                         | 0.10                         | 0.08             | 59               | 46              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 10                 | 0.64            | 0.24                        | 0.20                         | 0.16                         | 0.16             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 4         | 5.717        | 10        | 2:30 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 5         | 1.57         | 12        | 5:45 PM       | 15                 | 2.82            | 0.01                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 4         | 5.717        | 10        | 2:30 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 5         | 1.57         | 12        | 5:45 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 4         | 5.717        | 10        | 2:30 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 5         | 1.57         | 12        | 5:45 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 4         | 5.717        | 10        | 2:30 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 5         | 1.57         | 12        | 5:45 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 4         | 5.717        | 10        | 2:30 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 5         | 1.57         | 12        | 5:45 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 4         | 5.717        | 10        | 2:30 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 5         | 1.57         | 12        | 5:45 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 4         | 5.717        | 10        | 2:30 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 5         | 1.57         | 12        | 5:45 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 4         | 5.717        | 10        | 2:30 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 5         | 1.57         | 12        | 5:45 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 4         | 5.717        | 10        | 2:30 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 5         | 1.57         | 12        | 5:45 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 4         | 5.717        | 10        | 2:30 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 5         | 1.57         | 12        | 5:45 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 4         | 5.717        | 10        | 2:30 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 5         | 1.57         | 12        | 5:45 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 4         | 5.717        | 10        | 2:30 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 5         | 1.57         | 12        | 5:45 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 4         | 5.717        | 10        | 2:30 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 5         | 1.57         | 12        | 5:45 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 4         | 5.717        | 10        | 2:30 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 5         | 1.57         | 12        | 5:45 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 4         | 5.717        | 10        | 2:30 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 5         | 1.57         | 12        | 5:45 PM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 3         | 7.936        | 19        | 4:57 AM       | 15                 | 0.01            | 0.24                        | 0.04                         | 0.02                         | 0.02             | 48               | 39              | NRO             | 0.001        | 2.809 | None | Oats 2", fair soil, moist, dry.                     |               |                |                   |                |               |            |             |
| Dec. 23-24 | 4         | 5.717        | 10        | 2:30 PM       | 15                 |                 |                             |                              |                              |                  |                  |                 |                 |              |       |      |                                                     |               |                |                   |                |               |            |             |

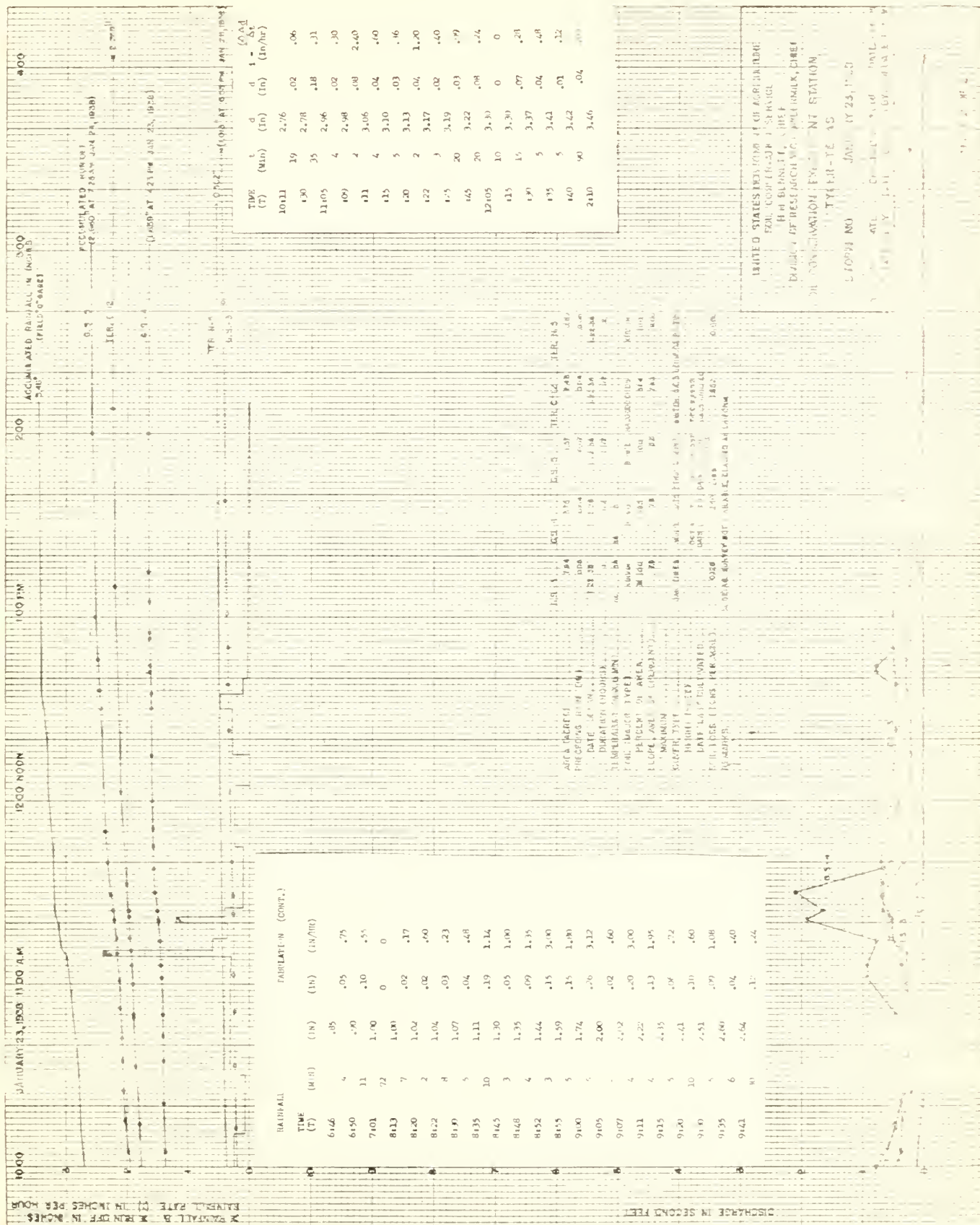
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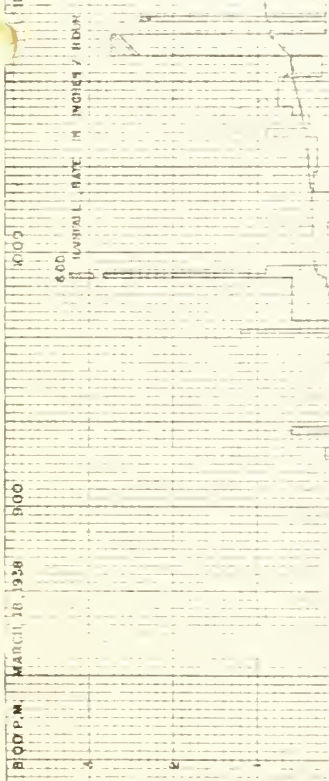
1287



1520

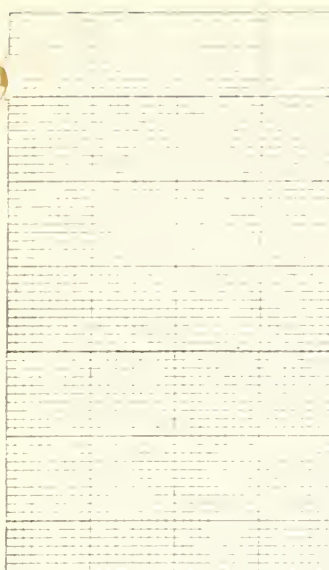
BLOOD M. MARCH 18, 1938

DISCHARGE IN SECONDS PER  
PUMP RATE (L) IN INCHES PER HOUR



| TIME (T) (MIN) | (IN) | (IN/HR) | (IN/HR) |
|----------------|------|---------|---------|
| 128            | 1.03 | 0       | .005    |
| 131            | 1.03 | 0       | .00     |
| 134            | 1.04 | 0       | .00     |
| 137            | 1.04 | 0       | .00     |
| 139            | 1.04 | 0       | .00     |
| 141            | 1.06 | 0       | .00     |
| 142            | 1.06 | 0       | .00     |
| 144            | 1.06 | 0       | .00     |
| 146            | 1.06 | 0       | .00     |
| 148            | 1.06 | 0       | .00     |
| 150            | 1.06 | 0       | .00     |
| 152            | 1.06 | 0       | .00     |
| 154            | 1.06 | 0       | .00     |
| 156            | 1.06 | 0       | .00     |
| 158            | 1.06 | 0       | .00     |
| 160            | 1.06 | 0       | .00     |
| 162            | 1.06 | 0       | .00     |
| 164            | 1.06 | 0       | .00     |
| 166            | 1.06 | 0       | .00     |
| 168            | 1.06 | 0       | .00     |
| 170            | 1.06 | 0       | .00     |
| 172            | 1.06 | 0       | .00     |
| 174            | 1.06 | 0       | .00     |
| 176            | 1.06 | 0       | .00     |
| 178            | 1.06 | 0       | .00     |
| 180            | 1.06 | 0       | .00     |
| 182            | 1.06 | 0       | .00     |
| 184            | 1.06 | 0       | .00     |
| 186            | 1.06 | 0       | .00     |
| 188            | 1.06 | 0       | .00     |
| 190            | 1.06 | 0       | .00     |
| 192            | 1.06 | 0       | .00     |
| 194            | 1.06 | 0       | .00     |
| 196            | 1.06 | 0       | .00     |
| 198            | 1.06 | 0       | .00     |
| 200            | 1.06 | 0       | .00     |

DISCHARGE IN SECONDS PER  
PUMP RATE (L) IN INCHES PER HOUR



| TIME (T) (MIN) | (IN) | (IN/HR) | (IN/HR) |
|----------------|------|---------|---------|
| 128            | 1.03 | 0       | .005    |
| 131            | 1.03 | 0       | .00     |
| 134            | 1.04 | 0       | .00     |
| 137            | 1.04 | 0       | .00     |
| 139            | 1.04 | 0       | .00     |
| 141            | 1.06 | 0       | .00     |
| 142            | 1.06 | 0       | .00     |
| 144            | 1.06 | 0       | .00     |
| 146            | 1.06 | 0       | .00     |
| 148            | 1.06 | 0       | .00     |
| 150            | 1.06 | 0       | .00     |
| 152            | 1.06 | 0       | .00     |
| 154            | 1.06 | 0       | .00     |
| 156            | 1.06 | 0       | .00     |
| 158            | 1.06 | 0       | .00     |
| 160            | 1.06 | 0       | .00     |
| 162            | 1.06 | 0       | .00     |
| 164            | 1.06 | 0       | .00     |
| 166            | 1.06 | 0       | .00     |
| 168            | 1.06 | 0       | .00     |
| 170            | 1.06 | 0       | .00     |
| 172            | 1.06 | 0       | .00     |
| 174            | 1.06 | 0       | .00     |
| 176            | 1.06 | 0       | .00     |
| 178            | 1.06 | 0       | .00     |
| 180            | 1.06 | 0       | .00     |
| 182            | 1.06 | 0       | .00     |
| 184            | 1.06 | 0       | .00     |
| 186            | 1.06 | 0       | .00     |
| 188            | 1.06 | 0       | .00     |
| 190            | 1.06 | 0       | .00     |
| 192            | 1.06 | 0       | .00     |
| 194            | 1.06 | 0       | .00     |
| 196            | 1.06 | 0       | .00     |
| 198            | 1.06 | 0       | .00     |
| 200            | 1.06 | 0       | .00     |

DISCHARGE IN SECONDS PER  
PUMP RATE (L) IN INCHES PER HOUR



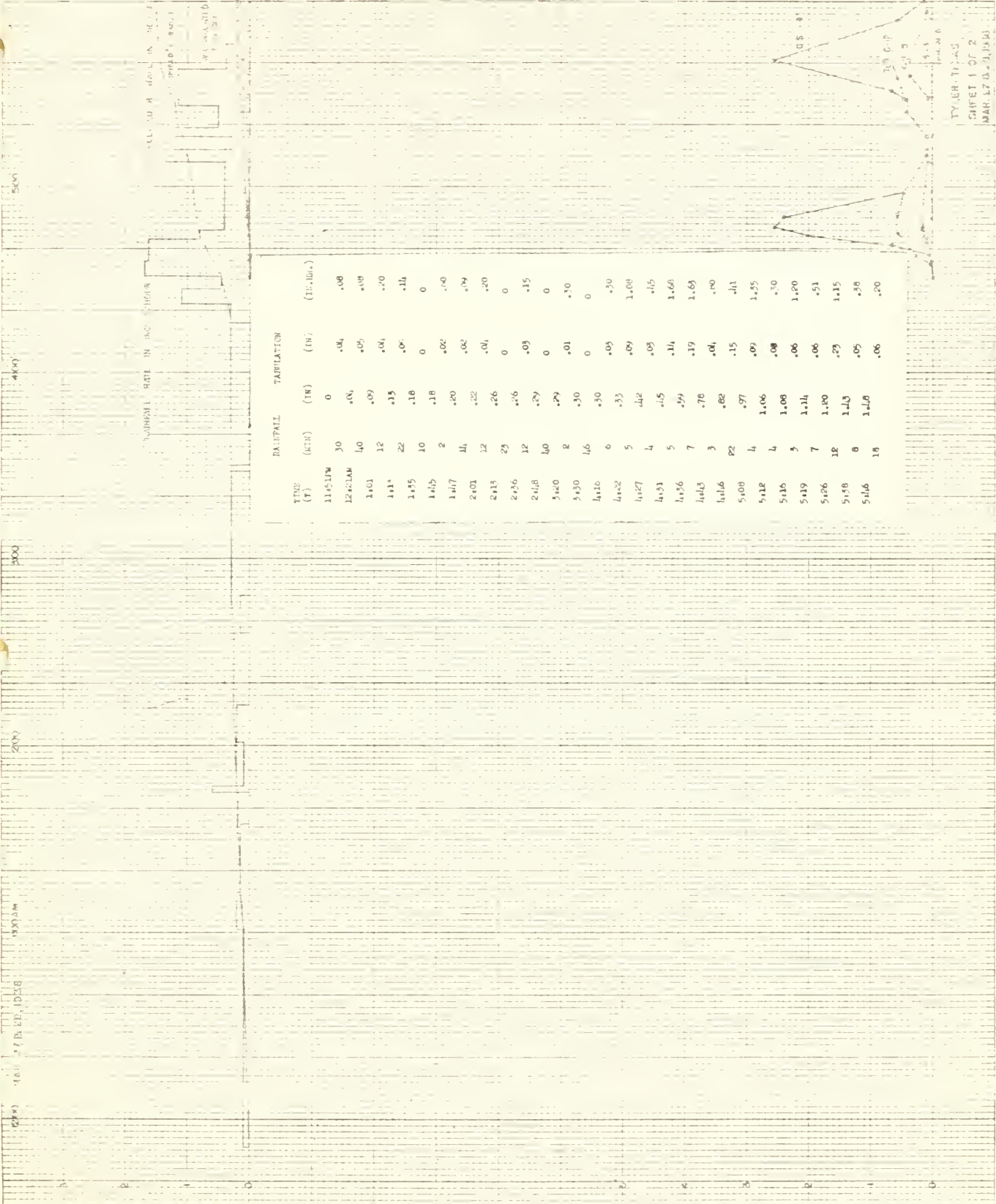
DISCHARGE IN SECONDS PER  
PUMP RATE (L) IN INCHES PER HOUR

12/12/2020



RAINFALL RATE (IN) IN INCHES PER HOUR

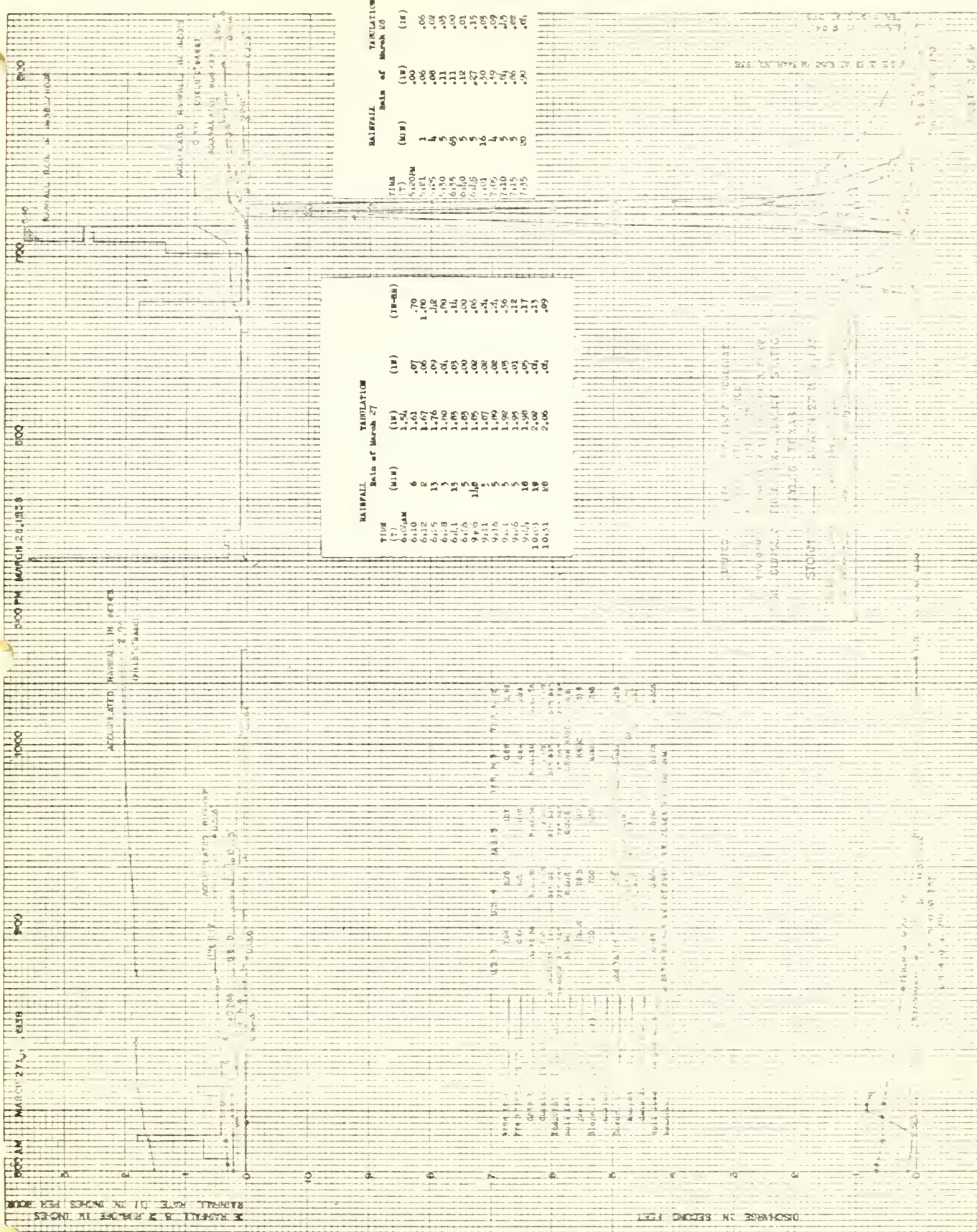
DISCHARGE IN CFS



RAINFALL TARIFF

| TIME (H) | (IN) | (IN) | (IN) | (IN) |
|----------|------|------|------|------|
| 11:51 AM | 0    | 0    | 0    | 0    |
| 12:01 AM | 0    | 0    | 0    | 0    |
| 1:01     | 0    | 0    | 0    | 0    |
| 1:11     | 0    | 0    | 0    | 0    |
| 1:25     | 0    | 0    | 0    | 0    |
| 1:35     | 0    | 0    | 0    | 0    |
| 1:47     | 0    | 0    | 0    | 0    |
| 2:01     | 0    | 0    | 0    | 0    |
| 2:13     | 0    | 0    | 0    | 0    |
| 2:26     | 0    | 0    | 0    | 0    |
| 2:36     | 0    | 0    | 0    | 0    |
| 2:48     | 0    | 0    | 0    | 0    |
| 3:00     | 0    | 0    | 0    | 0    |
| 3:10     | 0    | 0    | 0    | 0    |
| 3:16     | 0    | 0    | 0    | 0    |
| 3:22     | 0    | 0    | 0    | 0    |
| 3:27     | 0    | 0    | 0    | 0    |
| 3:31     | 0    | 0    | 0    | 0    |
| 3:36     | 0    | 0    | 0    | 0    |
| 3:43     | 0    | 0    | 0    | 0    |
| 3:46     | 0    | 0    | 0    | 0    |
| 3:48     | 0    | 0    | 0    | 0    |
| 3:50     | 0    | 0    | 0    | 0    |
| 3:52     | 0    | 0    | 0    | 0    |
| 3:57     | 0    | 0    | 0    | 0    |
| 4:01     | 0    | 0    | 0    | 0    |
| 4:06     | 0    | 0    | 0    | 0    |
| 4:12     | 0    | 0    | 0    | 0    |
| 4:15     | 0    | 0    | 0    | 0    |
| 4:16     | 0    | 0    | 0    | 0    |
| 4:18     | 0    | 0    | 0    | 0    |
| 4:20     | 0    | 0    | 0    | 0    |
| 4:22     | 0    | 0    | 0    | 0    |
| 4:27     | 0    | 0    | 0    | 0    |
| 4:31     | 0    | 0    | 0    | 0    |
| 4:36     | 0    | 0    | 0    | 0    |
| 4:43     | 0    | 0    | 0    | 0    |
| 4:46     | 0    | 0    | 0    | 0    |
| 4:50     | 0    | 0    | 0    | 0    |
| 4:52     | 0    | 0    | 0    | 0    |
| 4:56     | 0    | 0    | 0    | 0    |
| 5:00     | 0    | 0    | 0    | 0    |
| 5:12     | 0    | 0    | 0    | 0    |
| 5:15     | 0    | 0    | 0    | 0    |
| 5:19     | 0    | 0    | 0    | 0    |
| 5:26     | 0    | 0    | 0    | 0    |
| 5:36     | 0    | 0    | 0    | 0    |
| 5:46     | 0    | 0    | 0    | 0    |
| 5:56     | 0    | 0    | 0    | 0    |
| 6:06     | 0    | 0    | 0    | 0    |





| TIME (H) | RAINFALL RATE (IN/H) | DISCHARGE (CFS) |
|----------|----------------------|-----------------|
| 0        | 0.00                 | 0.00            |
| 100      | 0.00                 | 0.00            |
| 200      | 0.00                 | 0.00            |
| 300      | 0.00                 | 0.00            |
| 400      | 0.00                 | 0.00            |
| 500      | 0.00                 | 0.00            |
| 600      | 0.00                 | 0.00            |
| 700      | 0.00                 | 0.00            |
| 800      | 0.00                 | 0.00            |
| 900      | 0.00                 | 0.00            |
| 1000     | 0.00                 | 0.00            |

| TIME (H) | RAINFALL RATE (IN/H) | DISCHARGE (CFS) |
|----------|----------------------|-----------------|
| 0        | 0.00                 | 0.00            |
| 100      | 0.00                 | 0.00            |
| 200      | 0.00                 | 0.00            |
| 300      | 0.00                 | 0.00            |
| 400      | 0.00                 | 0.00            |
| 500      | 0.00                 | 0.00            |
| 600      | 0.00                 | 0.00            |
| 700      | 0.00                 | 0.00            |
| 800      | 0.00                 | 0.00            |
| 900      | 0.00                 | 0.00            |
| 1000     | 0.00                 | 0.00            |

| TIME (H) | RAINFALL RATE (IN/H) | DISCHARGE (CFS) |
|----------|----------------------|-----------------|
| 0        | 0.00                 | 0.00            |
| 100      | 0.00                 | 0.00            |
| 200      | 0.00                 | 0.00            |
| 300      | 0.00                 | 0.00            |
| 400      | 0.00                 | 0.00            |
| 500      | 0.00                 | 0.00            |
| 600      | 0.00                 | 0.00            |
| 700      | 0.00                 | 0.00            |
| 800      | 0.00                 | 0.00            |
| 900      | 0.00                 | 0.00            |
| 1000     | 0.00                 | 0.00            |

| TIME (H) | RAINFALL RATE (IN/H) | DISCHARGE (CFS) |
|----------|----------------------|-----------------|
| 0        | 0.00                 | 0.00            |
| 100      | 0.00                 | 0.00            |
| 200      | 0.00                 | 0.00            |
| 300      | 0.00                 | 0.00            |
| 400      | 0.00                 | 0.00            |
| 500      | 0.00                 | 0.00            |
| 600      | 0.00                 | 0.00            |
| 700      | 0.00                 | 0.00            |
| 800      | 0.00                 | 0.00            |
| 900      | 0.00                 | 0.00            |
| 1000     | 0.00                 | 0.00            |

| TIME (H) | RAINFALL RATE (IN/H) | DISCHARGE (CFS) |
|----------|----------------------|-----------------|
| 0        | 0.00                 | 0.00            |
| 100      | 0.00                 | 0.00            |
| 200      | 0.00                 | 0.00            |
| 300      | 0.00                 | 0.00            |
| 400      | 0.00                 | 0.00            |
| 500      | 0.00                 | 0.00            |
| 600      | 0.00                 | 0.00            |
| 700      | 0.00                 | 0.00            |
| 800      | 0.00                 | 0.00            |
| 900      | 0.00                 | 0.00            |
| 1000     | 0.00                 | 0.00            |



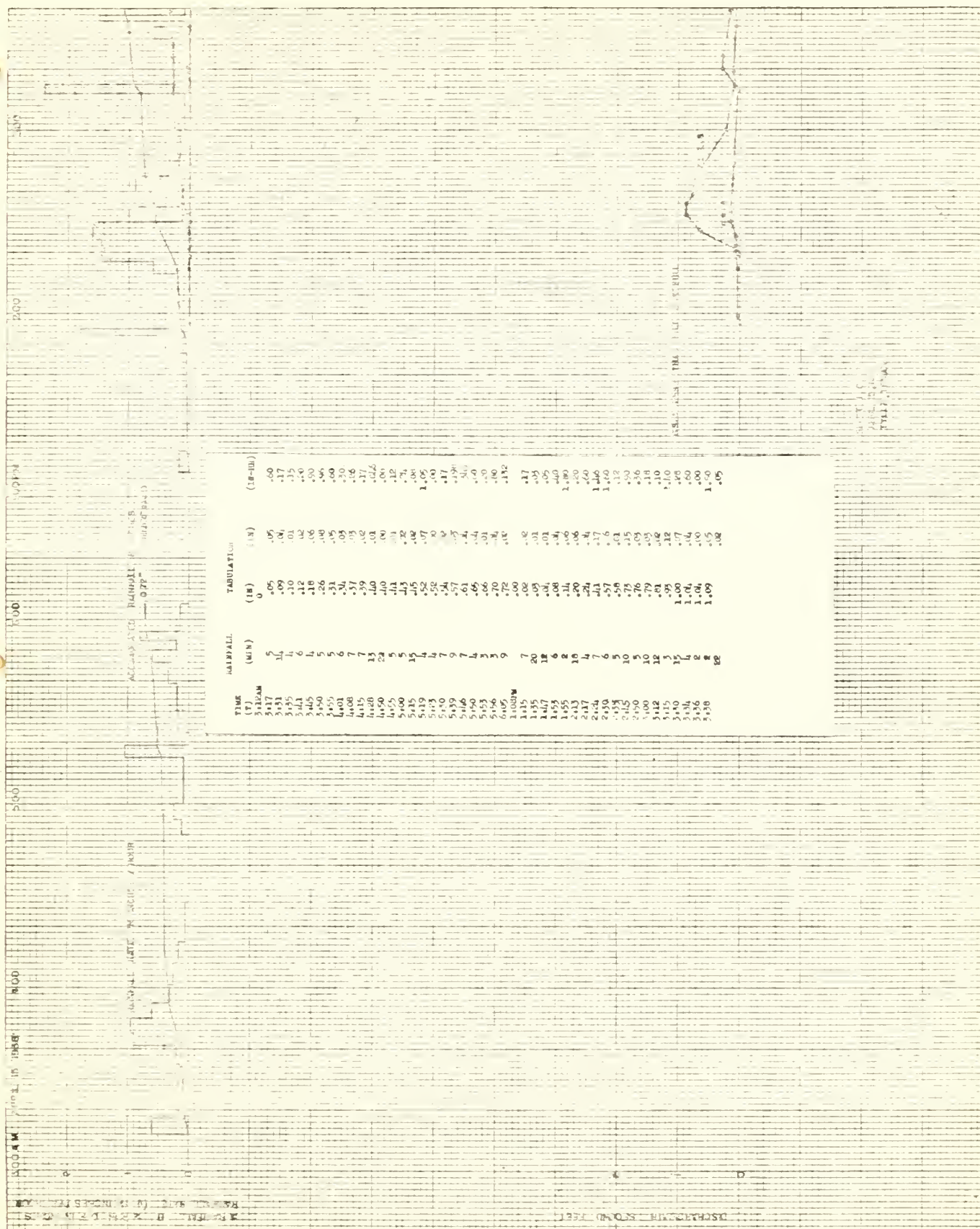
1000000













|               |                        |
|---------------|------------------------|
| 2 SYMBOLS     | 8 IN. OFF INCHES       |
| BASEBALL RATE | 10 IN. INCHES PER HOUR |

000

1  
2  
3

RAINFALL RATE IN MICHIGAN HOLD

—

—LPU—

| TIME<br>( $^{\circ}$ ) | RAILFALL<br>( $\mu$ IN) | (TH) | RAILFALL/CO | (TH) | (TH-IR)<br>( $\mu$ IN) |
|------------------------|-------------------------|------|-------------|------|------------------------|
| 11:00                  | 11.00                   | 1.11 | .05         |      | .00.1                  |
| 75                     | 75                      | 1.14 | .05         |      | .00.1                  |
| 5:15                   | 5.15                    | 1.14 | .05         |      | .00.1                  |
| 2:30                   | 2.30                    | 1.17 | .05         |      | .00.1                  |
| 12:00                  | 12.00                   | 1.22 | .05         |      | .00.1                  |
| 9:15                   | 9.15                    | 1.24 | .05         |      | .00.1                  |
| 6:30                   | 6.30                    | 1.24 | .05         |      | .00.1                  |
| 4:00                   | 4.00                    | 1.45 | .21         |      | .75                    |
| 35                     | 35                      | 1.55 | .08         |      | .11                    |
| 6:15                   | 6.15                    | 1.55 | .08         |      | .11                    |
| 7:05                   | 7.05                    | 1.55 | .08         |      | .12                    |
| 20                     | 20                      | 1.56 | .01         |      | .05                    |
| 15                     | 15                      | 1.59 | .02         |      | .05                    |
| 10                     | 10                      | 1.62 | .05         |      | .05                    |
| 8:00                   | 8.00                    | 1.62 | .01         |      | .05                    |
| 15                     | 15                      | 1.62 | .01         |      | .05                    |
| 19                     | 19                      | 1.63 | .01         |      | .05                    |
| 13                     | 13                      | 1.71 | .05         |      | .05                    |
| 5                      | 5                       | 1.72 | .01         |      | .12                    |
| 8:15                   | 8.15                    | 1.72 | .05         |      | .05                    |
| 10                     | 10                      | 1.76 | .05         |      | .05                    |
| 2:10                   | 2.10                    | 1.76 | .05         |      | .05                    |
| 9:30                   | 9.30                    | 1.77 | .05         |      | .05                    |

| 0.8, -3         | 0.8, -4 | 0.8, -5             |
|-----------------|---------|---------------------|
| 7.996           | 5.717   | 1.57                |
| 0.50            | 0.89    | 0.25                |
| 1.7-3.9         | 1.7-3.9 | 1.7-5.0             |
| 1.7-3.9         | 1.7-3.9 | 1.7-5.0             |
| 7.996           | 7.996   | 7.996               |
| Kirin           | Boole   | Boole               |
| not available   | 59.5    | 100                 |
| 7.3-8.4         | 7.5-8.6 | 5.5-8.6             |
| Woda (oak)      | lure    | Kirip or<br>Vetch A |
| Woda (oak)      | lure    | 2-3-1/2             |
| Recently placed | 0.110   |                     |
| 0.005           |         |                     |

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1786

2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 2681, 2682, 2683, 26

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1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

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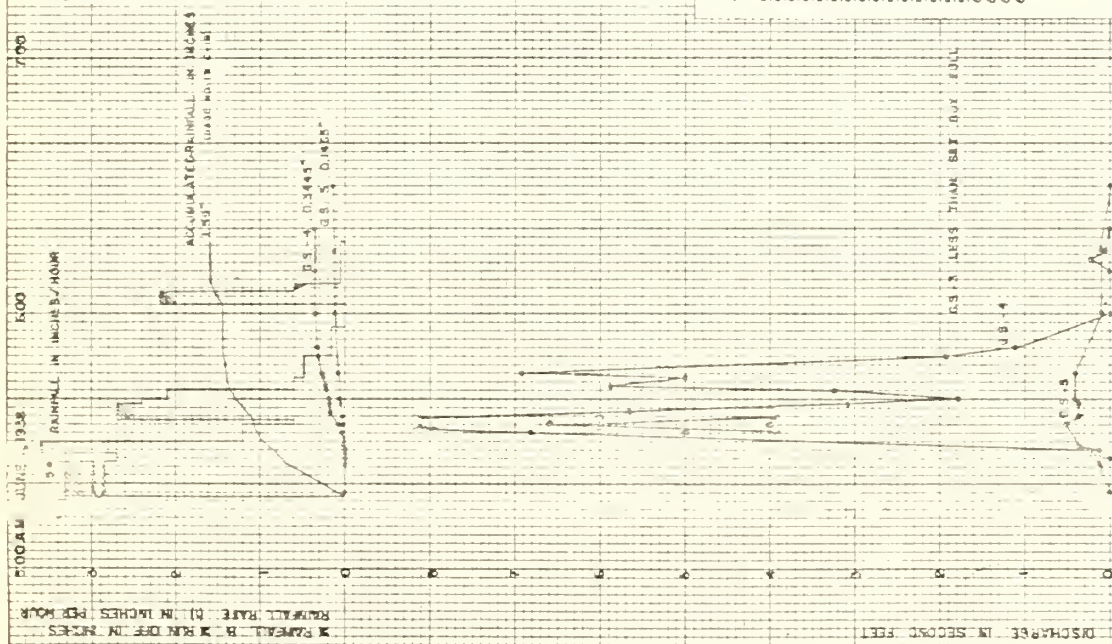
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1511





| TIME    | (1948) | (18) | (17) | (16-15) |
|---------|--------|------|------|---------|
| 5:17 AM | 7      | .00  | .62  | 5.31    |
| 5:25    | 5      | .01  | .71  | 5.10    |
| 5:35    | 2      | .60  | .69  | 2.70    |
| 5:45    | 2      | .60  | .12  | 3.60    |
| 5:50    | 2      | .90  | .05  | 1.00    |
| 5:52    | 2      | 1.82 | .04  | 1.30    |
| 5:54    | 2      | 1.05 | .04  | 1.20    |
| 5:55    | 1      | 1.07 | .01  | .60     |
| 5:59    | 4      | 1.25 | .18  | 2.70    |
| 6:10    | 1      | 1.39 | .04  | 2.10    |
| 6:12    | 2      | 1.36 | .07  | 2.10    |
| 6:15    | 2      | 1.39 | .05  | .60     |
| 6:18    | 7      | 1.15 | .10  | .18     |
| 6:17    | 7      | 1.05 | .06  | .10     |
| 6:18    | 5      | 1.45 | .11  | 2.20    |
| 6:19    | 3      | 1.46 | .08  | .60     |
| 6:17    | 2      | 1.54 | .01  | .06     |
| 6:17    | 10     | 1.59 | .01  | .06     |

| AREA (acres)              | PLANTING RATE (in.) | 0.9-4   | 0.9-5              |
|---------------------------|---------------------|---------|--------------------|
| DATE BEGAN                | 0.54                | 5.747   | 1.57               |
| PLANTING (acres)          | 5-23-98             | 0.54    | 0.52               |
| PLANTING (rows & m.)      | 1 1/4               | 5-23-98 | 5-23-98            |
| SOIL                      | 7-65                | 1 1/4   | 7-65               |
| PERCENT OF AREA           | 8-65                | 8-65    | 8-65               |
| SLOPE, AT GRADE (percent) | not available       | 59.5    | 100                |
| MAJORITY                  | 7.5%                | 7.0%    | 5.5%               |
| COVER, TYPE               | Woods (oak)         | Cypress | Cotton- oak stands |
| DATE LAST CUTTING         | 5-26-98             | 5-26-98 | 5-26-98            |
| SOIL LOSS (tons per acre) | .0005               | 5.111   | 0.177              |

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
R. B. BENNETT CHIEF  
DIVISION OF WASHINGTON, W. C. COMMUNELLE, CHIEF  
SOIL CONSERVATION EXTERMINAL STATION  
TYLER - TEXAS  
JUNE 1, 1938

STOCKY 20

For Stationary Sample - see also No. 10-7-38  
No. 10-7-38



1743





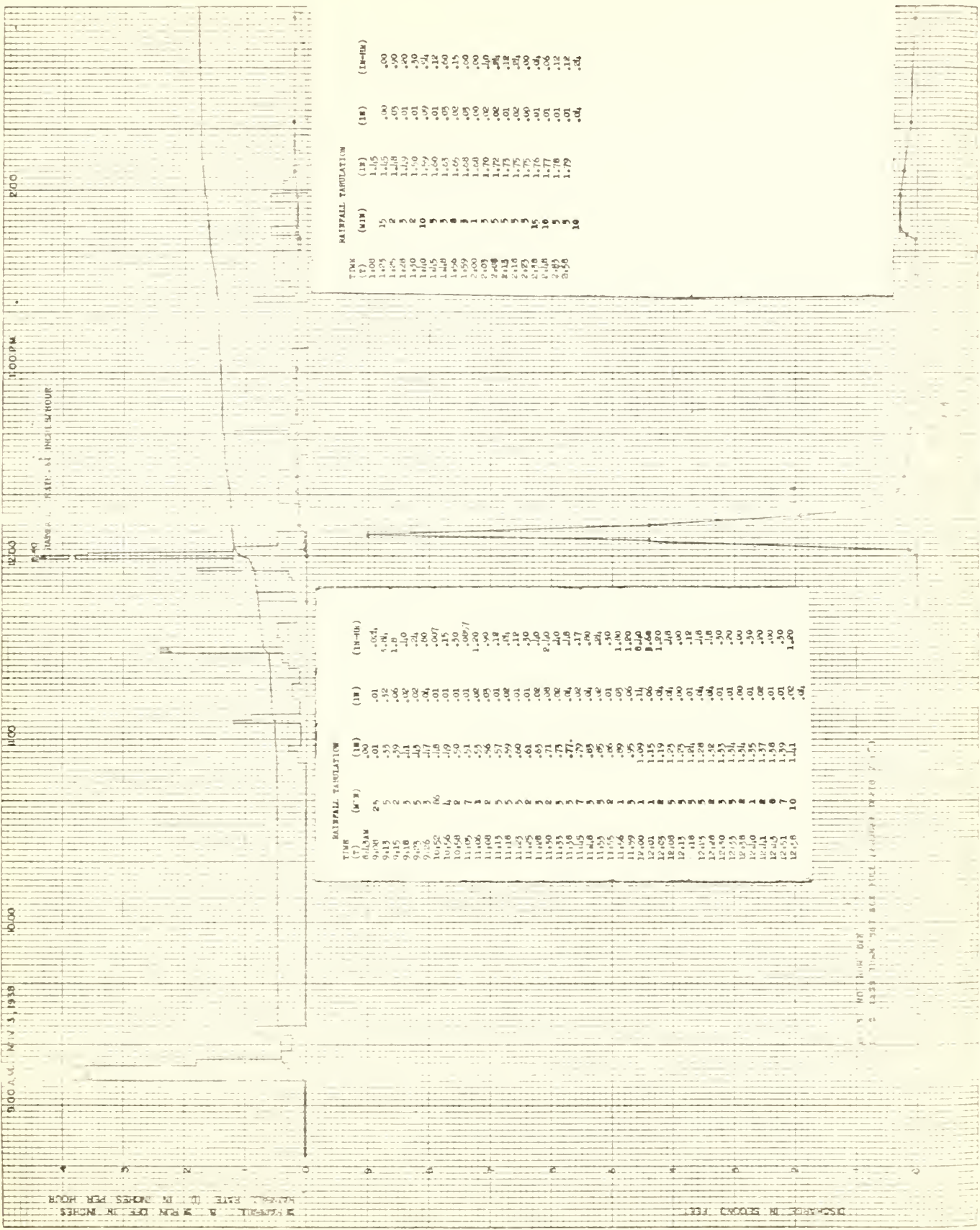








1207



RAINFALL RATE IN INCHES PER HOUR

| TIME (H) | (1H) | (1H) | (1H) | (1H) |
|----------|------|------|------|------|
| 9:00     | 0.00 | 0.00 | 0.00 | 0.00 |
| 9:15     | 0.00 | 0.00 | 0.00 | 0.00 |
| 9:30     | 0.00 | 0.00 | 0.00 | 0.00 |
| 9:45     | 0.00 | 0.00 | 0.00 | 0.00 |
| 10:00    | 1.50 | 0.00 | 0.00 | 0.00 |
| 10:15    | 1.50 | 0.00 | 0.00 | 0.00 |
| 10:30    | 1.50 | 0.00 | 0.00 | 0.00 |
| 10:45    | 1.50 | 0.00 | 0.00 | 0.00 |
| 11:00    | 1.50 | 0.00 | 0.00 | 0.00 |
| 11:15    | 1.50 | 0.00 | 0.00 | 0.00 |
| 11:30    | 1.50 | 0.00 | 0.00 | 0.00 |
| 11:45    | 1.50 | 0.00 | 0.00 | 0.00 |
| 12:00    | 1.50 | 0.00 | 0.00 | 0.00 |
| 12:15    | 1.50 | 0.00 | 0.00 | 0.00 |
| 12:30    | 1.50 | 0.00 | 0.00 | 0.00 |
| 12:45    | 1.50 | 0.00 | 0.00 | 0.00 |
| 1:00     | 1.50 | 0.00 | 0.00 | 0.00 |

DISCHARGE IN CUBIC FEET PER SECOND

| TIME (H) | (1H) | (1H) | (1H) | (1H) |
|----------|------|------|------|------|
| 9:00     | 0.00 | 0.00 | 0.00 | 0.00 |
| 9:15     | 0.00 | 0.00 | 0.00 | 0.00 |
| 9:30     | 0.00 | 0.00 | 0.00 | 0.00 |
| 9:45     | 0.00 | 0.00 | 0.00 | 0.00 |
| 10:00    | 0.00 | 0.00 | 0.00 | 0.00 |
| 10:15    | 0.00 | 0.00 | 0.00 | 0.00 |
| 10:30    | 800  | 0.00 | 0.00 | 0.00 |
| 10:45    | 800  | 0.00 | 0.00 | 0.00 |
| 11:00    | 800  | 0.00 | 0.00 | 0.00 |
| 11:15    | 800  | 0.00 | 0.00 | 0.00 |
| 11:30    | 800  | 0.00 | 0.00 | 0.00 |
| 11:45    | 800  | 0.00 | 0.00 | 0.00 |
| 12:00    | 800  | 0.00 | 0.00 | 0.00 |
| 12:15    | 800  | 0.00 | 0.00 | 0.00 |
| 12:30    | 800  | 0.00 | 0.00 | 0.00 |
| 12:45    | 800  | 0.00 | 0.00 | 0.00 |
| 1:00     | 800  | 0.00 | 0.00 | 0.00 |













WINDSPEED IN KNOTS  
 PRESSURE IN INCHES PER HOUR

7000 6000 5000 4000 3000 2000 1000 0

1000 2000 3000 4000 5000 6000 7000

1000 2000 3000 4000 5000 6000 7000

2000 3000 4000 5000 6000 7000

| TIME<br>(hr) | RAINFALL<br>(in) | RAINFALL<br>(in) | RAINFALL<br>(in) |
|--------------|------------------|------------------|------------------|
| 7:00         | 1.10             | 1.10             | 1.10             |
| 7:05         | 1.12             | 1.12             | 1.12             |
| 7:10         | 1.14             | 1.14             | 1.14             |
| 7:15         | 1.16             | 1.16             | 1.16             |
| 7:20         | 1.18             | 1.18             | 1.18             |
| 7:25         | 1.20             | 1.20             | 1.20             |
| 7:30         | 1.22             | 1.22             | 1.22             |
| 7:35         | 1.24             | 1.24             | 1.24             |
| 7:40         | 1.26             | 1.26             | 1.26             |
| 7:45         | 1.28             | 1.28             | 1.28             |
| 7:50         | 1.30             | 1.30             | 1.30             |
| 7:55         | 1.32             | 1.32             | 1.32             |
| 8:00         | 1.34             | 1.34             | 1.34             |
| 8:05         | 1.36             | 1.36             | 1.36             |
| 8:10         | 1.38             | 1.38             | 1.38             |
| 8:15         | 1.40             | 1.40             | 1.40             |
| 8:20         | 1.42             | 1.42             | 1.42             |
| 8:25         | 1.44             | 1.44             | 1.44             |
| 8:30         | 1.46             | 1.46             | 1.46             |
| 8:35         | 1.48             | 1.48             | 1.48             |
| 8:40         | 1.50             | 1.50             | 1.50             |
| 8:45         | 1.52             | 1.52             | 1.52             |
| 8:50         | 1.54             | 1.54             | 1.54             |
| 8:55         | 1.56             | 1.56             | 1.56             |
| 9:00         | 1.58             | 1.58             | 1.58             |
| 9:05         | 1.60             | 1.60             | 1.60             |
| 9:10         | 1.62             | 1.62             | 1.62             |
| 9:15         | 1.64             | 1.64             | 1.64             |
| 9:20         | 1.66             | 1.66             | 1.66             |
| 9:25         | 1.68             | 1.68             | 1.68             |
| 9:30         | 1.70             | 1.70             | 1.70             |
| 9:35         | 1.72             | 1.72             | 1.72             |
| 9:40         | 1.74             | 1.74             | 1.74             |
| 9:45         | 1.76             | 1.76             | 1.76             |
| 9:50         | 1.78             | 1.78             | 1.78             |
| 9:55         | 1.80             | 1.80             | 1.80             |
| 10:00        | 1.82             | 1.82             | 1.82             |

LET  
 1000 2000 3000 4000 5000 6000 7000





NO. 1000

400

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RAINFALL RATE IN INCHES PER HOUR

DISPERSED IN SECONDS PER HOUR

RAINFALL RATE IN INCHES PER HOUR

# RAINFALL TABULATION

| TIME<br>(H) | (MIN) | (15) | (30) | (45) |
|-------------|-------|------|------|------|
| 1:00        | 15    | 1.71 | 1.71 | 1.71 |
| 2:00        | 30    | 1.71 | 1.71 | 1.71 |
| 3:00        | 45    | 1.71 | 1.71 | 1.71 |
| 4:00        | 1:00  | 1.71 | 1.71 | 1.71 |
| 5:00        | 1:15  | 1.71 | 1.71 | 1.71 |
| 6:00        | 1:30  | 1.71 | 1.71 | 1.71 |
| 7:00        | 1:45  | 1.71 | 1.71 | 1.71 |
| 8:00        | 2:00  | 1.71 | 1.71 | 1.71 |
| 9:00        | 2:15  | 1.71 | 1.71 | 1.71 |
| 10:00       | 2:30  | 1.71 | 1.71 | 1.71 |
| 11:00       | 2:45  | 1.71 | 1.71 | 1.71 |
| 12:00       | 3:00  | 1.71 | 1.71 | 1.71 |

|                             |              |              |              |
|-----------------------------|--------------|--------------|--------------|
| AREA (acres)                | 7.77         | 0.7-4        | 0.7-5        |
| PERCENTAGE RAIN (in.)       | 1.77         | 5.77         | 1.57         |
| DATE (year)                 | 11-3-30      | 11-3-30      | 11-3-30      |
| TIME (hours)                | 7-15         | 7-15         | 7-15         |
| TEMPERATURE (max. & min.)   | 53-55        | 53-55        | 53-55        |
| WIND (direction & velocity) | None         | None         | None         |
| MOON (phase)                | None         | None         | None         |
| STATION, ADDRESS (precip.)  | 7.77         | 7.77         | 7.77         |
| COMMENTS                    | W. 100 (est) | W. 100 (est) | W. 100 (est) |
| HEIGHT (ft.)                | 1/12         | 1/12         | 1/12         |
| DATE LAST OBSERVED          | 11-3-30      | 11-3-30      | 11-3-30      |
| SOIL TYPE (tons per acre)   | 1.57         | 1.57         | 1.57         |
| REMARKS                     |              |              |              |



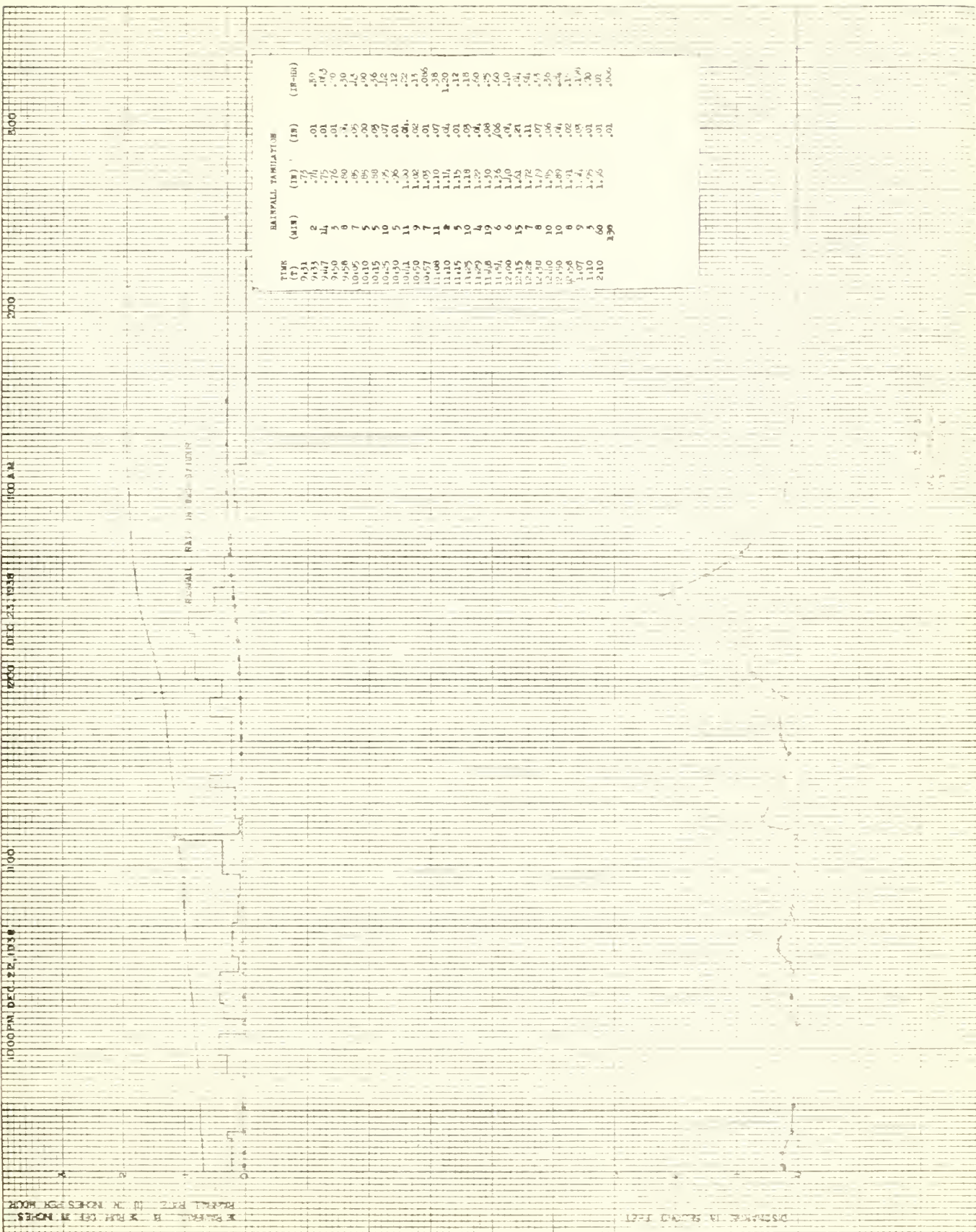




135

RECEIVED BY THE DIRECTOR OF THE FBI  
FEBRUARY 10 1964

12-11-1975 11:30 AM



1009





1000

| TIME<br>(H) | (MIN) | (SEC) | (IN) | (FT) | (IN-40) |
|-------------|-------|-------|------|------|---------|
| 2:30:00     | 00    | 00    | 00   | 00   | 00      |
| 2:30:01     | 01    | 00    | 00   | 00   | 00      |
| 2:30:02     | 02    | 00    | 00   | 00   | 00      |
| 2:30:03     | 03    | 00    | 00   | 00   | 00      |
| 2:30:04     | 04    | 00    | 00   | 00   | 00      |
| 2:30:05     | 05    | 00    | 00   | 00   | 00      |
| 2:30:06     | 06    | 00    | 00   | 00   | 00      |
| 2:30:07     | 07    | 00    | 00   | 00   | 00      |
| 2:30:08     | 08    | 00    | 00   | 00   | 00      |
| 2:30:09     | 09    | 00    | 00   | 00   | 00      |
| 2:30:10     | 10    | 00    | 00   | 00   | 00      |
| 2:30:11     | 11    | 00    | 00   | 00   | 00      |
| 2:30:12     | 12    | 00    | 00   | 00   | 00      |
| 2:30:13     | 13    | 00    | 00   | 00   | 00      |
| 2:30:14     | 14    | 00    | 00   | 00   | 00      |
| 2:30:15     | 15    | 00    | 00   | 00   | 00      |
| 2:30:16     | 16    | 00    | 00   | 00   | 00      |
| 2:30:17     | 17    | 00    | 00   | 00   | 00      |
| 2:30:18     | 18    | 00    | 00   | 00   | 00      |
| 2:30:19     | 19    | 00    | 00   | 00   | 00      |
| 2:30:20     | 20    | 00    | 00   | 00   | 00      |
| 2:30:21     | 21    | 00    | 00   | 00   | 00      |
| 2:30:22     | 22    | 00    | 00   | 00   | 00      |
| 2:30:23     | 23    | 00    | 00   | 00   | 00      |
| 2:30:24     | 24    | 00    | 00   | 00   | 00      |
| 2:30:25     | 25    | 00    | 00   | 00   | 00      |
| 2:30:26     | 26    | 00    | 00   | 00   | 00      |
| 2:30:27     | 27    | 00    | 00   | 00   | 00      |

DELETED IN SECOND SET

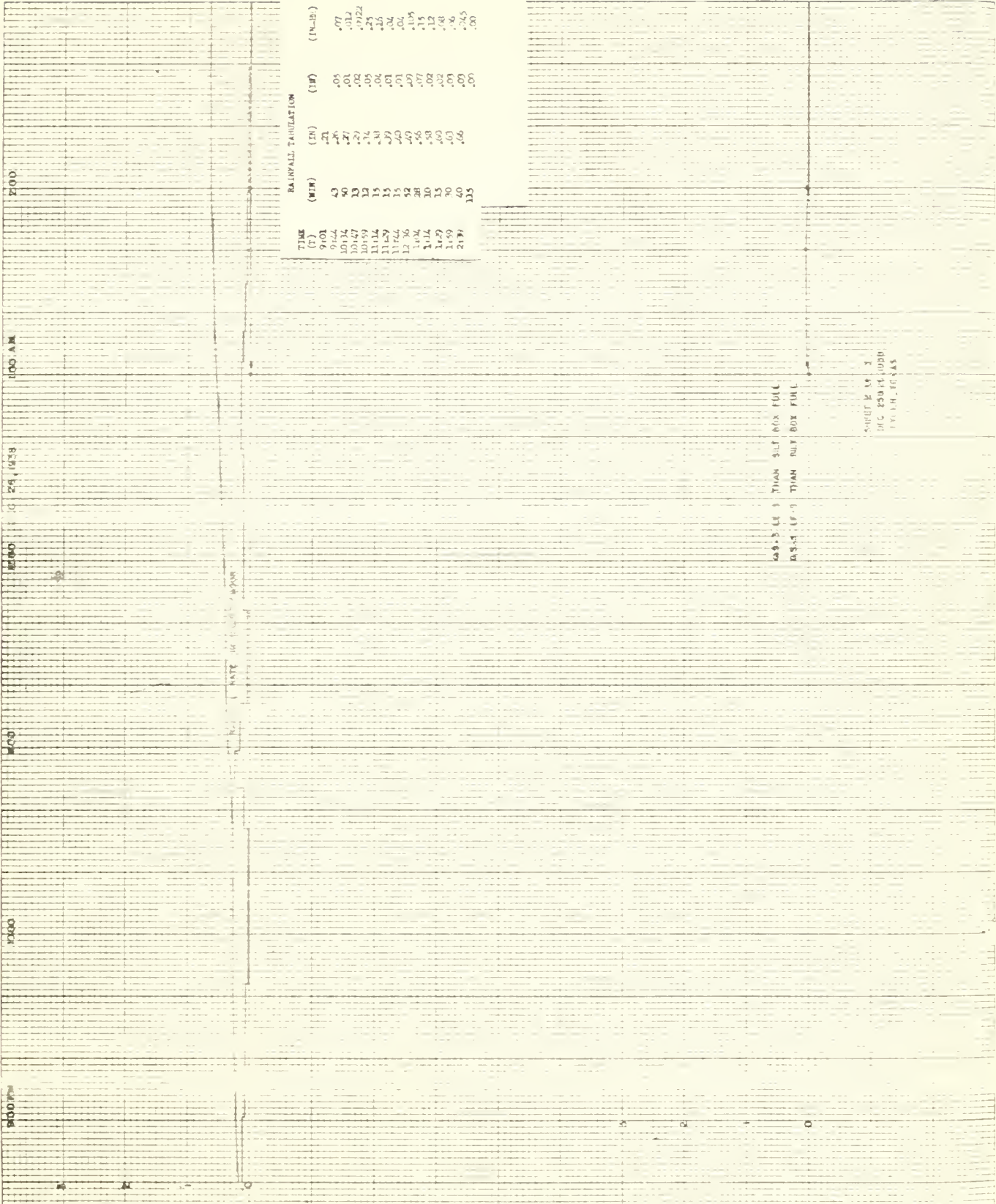
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1202



RAINFALL RATE IN INCHES PER HOUR

DISCHARGE IN CUBIC FEET



RAINFALL TABULATION

| TIME (HOURS) | (IN) | (IN) | (IN) |
|--------------|------|------|------|
| 9.03         | .01  | .01  | .01  |
| 9.04         | .01  | .01  | .01  |
| 9.05         | .01  | .01  | .01  |
| 9.06         | .01  | .01  | .01  |
| 9.07         | .01  | .01  | .01  |
| 9.08         | .01  | .01  | .01  |
| 9.09         | .01  | .01  | .01  |
| 9.10         | .01  | .01  | .01  |
| 9.11         | .01  | .01  | .01  |
| 9.12         | .01  | .01  | .01  |
| 9.13         | .01  | .01  | .01  |
| 9.14         | .01  | .01  | .01  |
| 9.15         | .01  | .01  | .01  |
| 9.16         | .01  | .01  | .01  |
| 9.17         | .01  | .01  | .01  |
| 9.18         | .01  | .01  | .01  |
| 9.19         | .01  | .01  | .01  |
| 9.20         | .01  | .01  | .01  |
| 9.21         | .01  | .01  | .01  |
| 9.22         | .01  | .01  | .01  |
| 9.23         | .01  | .01  | .01  |
| 9.24         | .01  | .01  | .01  |
| 9.25         | .01  | .01  | .01  |
| 9.26         | .01  | .01  | .01  |
| 9.27         | .01  | .01  | .01  |
| 9.28         | .01  | .01  | .01  |
| 9.29         | .01  | .01  | .01  |
| 9.30         | .01  | .01  | .01  |
| 9.31         | .01  | .01  | .01  |
| 9.32         | .01  | .01  | .01  |
| 9.33         | .01  | .01  | .01  |
| 9.34         | .01  | .01  | .01  |
| 9.35         | .01  | .01  | .01  |
| 9.36         | .01  | .01  | .01  |
| 9.37         | .01  | .01  | .01  |
| 9.38         | .01  | .01  | .01  |
| 9.39         | .01  | .01  | .01  |
| 9.40         | .01  | .01  | .01  |
| 9.41         | .01  | .01  | .01  |
| 9.42         | .01  | .01  | .01  |
| 9.43         | .01  | .01  | .01  |
| 9.44         | .01  | .01  | .01  |
| 9.45         | .01  | .01  | .01  |
| 9.46         | .01  | .01  | .01  |
| 9.47         | .01  | .01  | .01  |
| 9.48         | .01  | .01  | .01  |
| 9.49         | .01  | .01  | .01  |
| 9.50         | .01  | .01  | .01  |
| 9.51         | .01  | .01  | .01  |
| 9.52         | .01  | .01  | .01  |
| 9.53         | .01  | .01  | .01  |
| 9.54         | .01  | .01  | .01  |
| 9.55         | .01  | .01  | .01  |
| 9.56         | .01  | .01  | .01  |
| 9.57         | .01  | .01  | .01  |
| 9.58         | .01  | .01  | .01  |
| 9.59         | .01  | .01  | .01  |
| 9.60         | .01  | .01  | .01  |
| 9.61         | .01  | .01  | .01  |
| 9.62         | .01  | .01  | .01  |
| 9.63         | .01  | .01  | .01  |
| 9.64         | .01  | .01  | .01  |
| 9.65         | .01  | .01  | .01  |
| 9.66         | .01  | .01  | .01  |
| 9.67         | .01  | .01  | .01  |
| 9.68         | .01  | .01  | .01  |
| 9.69         | .01  | .01  | .01  |
| 9.70         | .01  | .01  | .01  |
| 9.71         | .01  | .01  | .01  |
| 9.72         | .01  | .01  | .01  |
| 9.73         | .01  | .01  | .01  |
| 9.74         | .01  | .01  | .01  |
| 9.75         | .01  | .01  | .01  |
| 9.76         | .01  | .01  | .01  |
| 9.77         | .01  | .01  | .01  |
| 9.78         | .01  | .01  | .01  |
| 9.79         | .01  | .01  | .01  |
| 9.80         | .01  | .01  | .01  |
| 9.81         | .01  | .01  | .01  |
| 9.82         | .01  | .01  | .01  |
| 9.83         | .01  | .01  | .01  |
| 9.84         | .01  | .01  | .01  |
| 9.85         | .01  | .01  | .01  |
| 9.86         | .01  | .01  | .01  |
| 9.87         | .01  | .01  | .01  |
| 9.88         | .01  | .01  | .01  |
| 9.89         | .01  | .01  | .01  |
| 9.90         | .01  | .01  | .01  |
| 9.91         | .01  | .01  | .01  |
| 9.92         | .01  | .01  | .01  |
| 9.93         | .01  | .01  | .01  |
| 9.94         | .01  | .01  | .01  |
| 9.95         | .01  | .01  | .01  |
| 9.96         | .01  | .01  | .01  |
| 9.97         | .01  | .01  | .01  |
| 9.98         | .01  | .01  | .01  |
| 9.99         | .01  | .01  | .01  |
| 10.00        | .01  | .01  | .01  |

RAINFALL RATE IN INCHES PER HOUR

DISCHARGE IN CUBIC FEET



Page 1

85

At 100

11-10-11

[illegible]

DISTANCE IN SECONDS. FEET

[illegible]

14051  
81-2

1933





**UNITED STATES DEPARTMENT OF AGRICULTURE**  
**SOIL CONSERVATION SERVICE**  
 DIVISION OF RESEARCH

Month JANUARY, 1934  
 Sheet 1 of 18 SHEETS

**RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS**

Project SCS Experiment Station, Tyler, Texas

| Date     | WATERSHED |              | RAINFALL |              |                    |                 |                             |                              | TEMPERATURES (degrees F)     |         |         | RUN-OFF       |               |              |         | RAINFALL MEAN (inches) | Days Lost (days per acre) | Comments or Watershed |
|----------|-----------|--------------|----------|--------------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|---------|---------|---------------|---------------|--------------|---------|------------------------|---------------------------|-----------------------|
|          | Number    | Area (acres) | Gage No. | Begin (hour) | Duration (minutes) | Amount (inches) | Maximum Intensity           |                              |                              | Maximum | Minimum | Feet (1 hour) | Feet (1 hour) | Maximum Rate |         |                        |                           |                       |
|          |           |              |          |              |                    |                 | 6 minutes (inches per hour) | 18 minutes (inches per hour) | 30 minutes (inches per hour) |         |         |               |               | Cu ft. sec.  | Time    |                        |                           |                       |
| (1)      | (2)       | (3)          | (4)      | (5)          | (6)                | (7)             | (8)                         | (9)                          | (10)                         | (11)    | (12)    | (13)          | (14)          | (15)         | (16)    | (17)                   | (18)                      |                       |
| 1939     |           |              |          |              |                    |                 |                             |                              |                              |         |         |               |               |              |         |                        |                           |                       |
|          | 3         | 7.936        | 19-C-14  |              |                    | 0.02            |                             |                              |                              | 70      | 50      |               |               |              |         |                        |                           |                       |
|          | 4         | 5.747        | 10-F-C   | 10:08PM      | 39                 | 0.02            | 0.12                        | 0.04                         | 0.03                         | 70      | 50      |               |               |              |         |                        |                           |                       |
|          | 5         | 1.57         | 12-F-A   | 10:10PM      | 20                 | 0.03            |                             |                              |                              | 70      | 50      |               |               |              |         |                        |                           |                       |
|          |           |              |          |              |                    |                 |                             |                              |                              |         |         |               |               |              |         |                        |                           |                       |
| Jan. 8-9 | 3         | 7.936        | 19       | 8:15PM       | 393                | 1.52            | 1.44                        | 0.76                         | 0.48                         | 72-65   | 53-51   |               |               |              |         |                        |                           |                       |
|          | 3         | 7.936        | 19       | 3:50AM       | 312                | 0.46            | 0.09                        | 0.40                         | 0.30                         | 65      | 51      |               |               |              |         |                        |                           |                       |
|          | 4         | 5.747        | 10-F-C   | 8:10PM       | 387                | 1.50            | 1.44                        | 0.76                         | 0.50                         | 72-65   | 53-51   |               |               |              |         |                        |                           |                       |
| Jan. 9   | 4         | 5.747        | 10-F-C   | 3:43AM       | 325                | 0.48            | 0.48                        | 0.36                         | 0.26                         | 65      | 51      |               |               | 1.86         | 11:33PM |                        |                           |                       |
|          | 4         | 5.747        | 10-F-C   | 3:43AM       | 325                | 1.98            |                             |                              |                              |         |         |               |               |              |         |                        |                           |                       |
|          | 5         | 1.57         | 12-F-A   | 8:06PM       | 301                | 1.50            | 1.32                        | 0.72                         | 0.48                         | 72-65   | 53-51   |               | 0.220         |              |         | 1.760                  | 0.477                     |                       |
| Jan. 6-9 | 5         | 1.57         | 12-F-A   | 3:33AM       | 322                | 0.42            | 0.48                        | 0.32                         | 0.24                         | 65      | 51      |               |               |              |         |                        |                           |                       |
|          | 5         | 1.57         | 12-F-A   | 3:33AM       | 322                | 1.92            |                             |                              |                              |         |         |               |               | No rate      |         | 1.475                  | 0.019                     |                       |
|          |           |              |          |              |                    |                 |                             |                              |                              |         |         |               |               |              |         |                        |                           |                       |
| Jan. 11  | 3         | 7.936        | 19       | 9:59AM       | 75                 | 0.05            | 0.12                        | 0.08                         | 0.06                         | 60      | 45      |               |               |              |         |                        |                           |                       |
|          | 3         | 7.936        | 19       | 12:36PM      | 368                | 0.48            | 0.36                        | 0.24                         | 0.24                         | 60      | 45      |               |               |              |         |                        |                           |                       |
|          | 3         | 7.936        | 19       | 7:47PM       | 307                | 0.36            | 0.36                        | 0.24                         | 0.18                         | 60      | 45      |               |               |              |         |                        |                           |                       |
| Jan. 12  | 3         | 7.936        | 19       | 12:52AM      | 772                | 0.96            | 0.36                        | 0.36                         | 0.32                         | 46      | 42      |               |               |              |         |                        |                           |                       |
|          | 4         | 5.747        | 10-F-C   | 9:55AM       | 70                 | 0.05            | 0.08                        | 0.08                         | 0.08                         | 60      | 45      |               |               |              |         |                        |                           |                       |
|          | 4         | 5.747        | 10-F-C   | 12:30PM      | 375                | 0.56            | 0.36                        | 0.24                         | 0.24                         | 60      | 45      |               |               | .38          | 4:58PM  |                        |                           |                       |
| 11-12    | 4         | 5.747        | 10-F-C   | 7:40AM       | 1080               | 1.22            | 0.36                        | 0.36                         | 0.28                         | 50-46   | 45-42   |               | 0.422         | .77          | 2:19AM  |                        |                           |                       |
|          | 4         | 5.747        | 10-F-C   | 7:40AM       | 1080               | 1.83            |                             |                              |                              |         |         |               |               |              |         | 1.408                  | 0.233                     |                       |
|          | 4         | 5.747        | 10-F-C   | 7:40AM       | 1080               | 1.83            |                             |                              |                              |         |         |               |               |              |         |                        |                           |                       |
| Jan. 11  | 5         | 1.57         | 12-F-A   | 10:04AM      | 80                 | 0.04            | 0.12                        | 0.08                         | 0.06                         | 60      | 45      |               |               |              |         |                        |                           |                       |
|          | 5         | 1.57         | 12-F-A   | 1:30PM       | 313                | 0.53            | 0.36                        | 0.24                         | 0.24                         | 60      | 45      |               |               |              |         |                        |                           |                       |
|          | 5         | 1.57         | 12-F-A   | 7:43PM       | 1080               | 1.23            | 0.36                        | 0.36                         | 0.30                         | 50-46   | 45-42   |               |               |              |         |                        |                           |                       |
| Jan. 15  | 3         | 7.936        | 19       | 12:38AM      | 100                | 0.19            | 0.24                        | 0.16                         | 0.12                         | 52      | 35      |               |               |              |         |                        |                           |                       |
|          | 4         | 5.747        | 10-F-C   | 12:35AM      | 90                 | 0.18            | 0.24                        | 0.16                         | 0.14                         | 52      | 35      |               |               |              |         |                        |                           |                       |
|          | 5         | 1.57         | 12-F-A   | 12:40AM      | 90                 | 0.18            | 0.24                        | 0.16                         | 0.14                         | 52      | 35      |               |               |              |         |                        |                           |                       |
| Jan. 17  | 3         | 7.936        | 19       | 5:18AM       | 100                | 0.18            | 0.60                        | 0.36                         | 0.18                         | 57      | 40      |               |               |              |         |                        |                           |                       |
|          | 4         | 5.747        | 10-F-C   | 4:55AM       | 145                | 0.19            | 0.72                        | 0.40                         | 0.22                         | 57      | 40      |               | 0.005         | No rate      |         | 0.185                  | 0.000                     |                       |
|          | 5         | 1.57         | 12-F-C   | 5:12AM       | 123                | 0.23            | 0.84                        | 0.52                         | 0.28                         | 57      | 40      |               |               |              |         |                        |                           |                       |
| Jan. 23  | 3         | 7.936        | 19       | 4:50AM       | 420                | 0.56            | 0.72                        | 0.36                         | 0.24                         | 48      | 36      |               |               |              |         |                        |                           |                       |
|          | 4         | 5.747        | 10-F-C   | 4:40AM       | 410                | 0.55            | 0.72                        | 0.40                         | 0.24                         | 48      | 36      |               | 0.018         | No rate      |         | 0.562                  | 0.013                     |                       |
|          | 5         | 1.57         | 12-F-A   | 4:55AM       | 382                | 0.57            | 0.40                        | 0.32                         | 0.24                         | 48      | 36      |               |               |              |         |                        |                           |                       |



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UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
DIVISION OF RESEARCH

MONTH Feb. & Mar., 1939  
SHEET 3 OF 13 SHEETS

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

Project 828 Experiment Station, Tyler, Texas

| Date    | Watershed |              | Rainfall |                |                    |                 |                         |                          | Transpiration (average 7) |                   | Run-off         |                 |      |                 | Ruffalo minus (inches) | Dry Low (tons per acre) | Conversion of Watershed |                                   |
|---------|-----------|--------------|----------|----------------|--------------------|-----------------|-------------------------|--------------------------|---------------------------|-------------------|-----------------|-----------------|------|-----------------|------------------------|-------------------------|-------------------------|-----------------------------------|
|         | Number    | Area (acres) | Open No. | Period (hours) | Duration (minutes) | Amount (inches) | Maximum Evaporation     |                          |                           | Inches (per hour) | Amount (inches) | Maximum Rate    |      | Inches (inches) |                        |                         |                         |                                   |
|         |           |              |          |                |                    |                 | 8 in. (inches per hour) | 10 in. (inches per hour) | 20 in. (inches per hour)  |                   |                 | Cu ft. per sec. | Time |                 |                        |                         |                         |                                   |
| 1939    | (1)       | (2)          | (3)      | (4)            | (5)                | (6)             | (7)                     | (8)                      | (9)                       | (10)              | (11)            | (12)            | (13) | (14)            | (15)                   | (16)                    | (17)                    | (18)                              |
| Feb. 17 | 3         | 7.936        | 19       | 12:00PM        | 390                | 1.44            | 0.72                    | 0.44                     | 62                        | 39                |                 |                 |      |                 |                        |                         |                         |                                   |
|         | 3         | 7.936        | 19       | 8:55AM         | 10                 | 0.02            | 0.03                    | 0.04                     | 62                        | 39                |                 |                 |      |                 |                        |                         |                         | Food (oak); dormant               |
|         | 3         | 7.936        | 19       | 2:10PM         | 260                | 0.09            | 0.12                    | 0.08                     | 69                        | 45                |                 |                 |      |                 |                        |                         |                         | Food (oak); dormant               |
|         | 3         | 7.936        | 19       | 2:25AM         | 10                 | 0.03            | 0.12                    | 0.06                     | 67                        | 47                |                 |                 |      |                 |                        |                         |                         | Food (oak); dormant               |
|         | 3         | 7.936        | 19       | 5:27AM         | 320                | 1.29            | 2.16                    | 0.90                     | 67                        | 47                |                 |                 |      |                 |                        |                         |                         | Food (oak); dormant               |
| Feb. 17 | 4         | 5.747        | 10-F-C   | 10:55AM        | 450                | 2.64            | 1.24                    | 0.72                     | 62                        | 39                |                 |                 |      |                 |                        |                         |                         |                                   |
|         | 4         | 5.747        | 10-F-C   | 8:10AM         | 60                 | 0.02            | 0.02                    | 0.02                     | 62                        | 39                |                 |                 |      |                 |                        |                         |                         | Outs, good stand, 4" high         |
|         | 4         | 5.747        | 10-F-C   | 11:25AM        | 375                | 0.12            | 0.16                    | 0.10                     | 69                        | 45                |                 |                 |      |                 |                        |                         |                         | Outs, good stand, 4" high         |
|         | 4         | 5.747        | 10-F-C   | 2:22AM         | 20                 | 0.04            | 0.15                    | 0.08                     | 67                        | 47                |                 |                 |      |                 |                        |                         |                         | Outs, good stand, 4" high         |
|         | 4         | 5.747        | 10-F-C   | 5:27AM         | 330                | 1.23            | 1.92                    | 0.68                     | 67                        | 47                |                 |                 |      |                 |                        |                         |                         | Outs, good stand, 4" high         |
| Feb. 17 | 5         | 1.57         | 12-F-A   | 11:15AM        | 450                | 2.55            | 1.44                    | 0.84                     | 62                        | 39                |                 |                 |      |                 |                        |                         |                         |                                   |
|         | 5         | 1.57         | 12-F-A   | 8:21PM         | 45                 | 0.02            | 0.08                    | 0.02                     | 62                        | 39                |                 |                 |      |                 |                        |                         |                         | Outs 3", good; vetch 1 1/2" fair  |
|         | 5         | 1.57         | 12-F-A   | 11:55AM        | 330                | 0.13            | 0.24                    | 0.10                     | 69                        | 45                |                 |                 |      |                 |                        |                         |                         | Outs 3", good; vetch 1 1/2" fair  |
|         | 5         | 1.57         | 12-F-A   | 2:30AM         | 60                 | 0.03            | 0.04                    | 0.04                     | 67                        | 47                |                 |                 |      |                 |                        |                         |                         | Outs 3", good; vetch 1 1/2" fair  |
|         | 5         | 1.57         | 12-F-A   | 5:30AM         | 320                | 1.12            | 1.32                    | 0.50                     | 67                        | 47                |                 |                 |      |                 |                        |                         |                         | Outs 3", good; vetch 1 1/2" fair  |
| Feb. 24 | 3         | 7.936        | 19       | 9:30AM         | 205                | 0.18            | 0.35                    | 0.20                     | 55                        | 46                |                 |                 |      |                 |                        |                         |                         |                                   |
|         | 3         | 7.936        | 19       | 2:40PM         | 40                 | 0.07            | 0.24                    | 0.15                     | 55                        | 46                |                 |                 |      |                 |                        |                         |                         | Woods (oak); dormant; 1st covered |
|         | 3         | 7.936        | 19       | 5:03PM         | 418                | 0.21            | 0.35                    | 0.24                     | 55                        | 46                |                 |                 |      |                 |                        |                         |                         | Woods (oak) dormant               |
|         | 3         | 7.936        | 19       | 8:05AM         | 375                | 1.49            | 1.44                    | 1.20                     | 57                        | 38                |                 |                 |      |                 |                        |                         |                         | Woods (oak) dormant               |
|         | 3         | 7.936        | 19       | 8:45AM         | 240                | 0.05            |                         |                          | 57                        | 38                |                 |                 |      |                 |                        |                         |                         | Woods (oak) dormant               |
| Feb. 24 | 4         | 5.747        | 10-F-C   | 9:25AM         | 205                | 2.00            | 0.36                    | 0.75                     | 55                        | 46                |                 |                 |      |                 |                        |                         |                         |                                   |
|         | 4         | 5.747        | 10-F-C   | 2:35PM         | 15                 | 0.08            | 0.12                    | 0.14                     | 55                        | 46                |                 |                 |      |                 |                        |                         |                         | Outs good stand, 4" high          |
|         | 4         | 5.747        | 10-F-C   | 4:57PM         | 339                | 0.19            | 0.30                    | 0.24                     | 55                        | 46                |                 |                 |      |                 |                        |                         |                         | Outs good stand, 4" high          |
|         | 4         | 5.747        | 10-F-C   | 4:00AM         | 370                | 1.54            | 1.56                    | 1.20                     | 57                        | 38                |                 |                 |      |                 |                        |                         |                         | Outs good stand, 4" high          |
|         | 4         | 5.747        | 10-F-C   | 3:41AM         | 313                | 0.06            |                         |                          | 57                        | 38                |                 |                 |      |                 |                        |                         |                         | Outs good stand, 4" high          |
| Feb. 24 | 5         | 1.57         | 12-F-A   | 9:30AM         | 198                | 2.02            | 0.36                    | 0.24                     | 55                        | 46                |                 |                 |      |                 |                        |                         |                         |                                   |
|         | 5         | 1.57         | 12-F-A   | 2:38PM         | 45                 | 0.08            | 0.24                    | 0.16                     | 55                        | 46                |                 |                 |      |                 |                        |                         |                         | Outs, good stand 4" vetch 2" fa   |
|         | 5         | 1.57         | 12-F-A   | 5:01PM         | 340                | 0.16            | 0.24                    | 0.20                     | 55                        | 46                |                 |                 |      |                 |                        |                         |                         | Outs, good stand 4" vetch 2" fa   |
|         | 5         | 1.57         | 12-F-A   | 4:05AM         | 360                | 1.52            | 1.44                    | 1.06                     | 57                        | 38                |                 |                 |      |                 |                        |                         |                         | Outs, good stand 4" vetch 2" fa   |
|         | 5         | 1.57         | 12-F-A   | 8:47AM         | 233                | 0.07            |                         |                          | 57                        | 38                |                 |                 |      |                 |                        |                         |                         | Outs, good stand 4" vetch 2" fa   |
| March 4 | 3         | 7.936        | 19       |                |                    | 0.03            |                         |                          | 76                        | 51                |                 |                 |      |                 |                        |                         |                         |                                   |
|         | 4         | 5.747        | 10-F-C   |                |                    | 0.03            |                         |                          | 76                        | 51                |                 |                 |      |                 |                        |                         |                         | Food (oak); dormant               |
|         | 5         | 1.57         | 12-F-A   |                |                    | 0.03            |                         |                          | 76                        | 51                |                 |                 |      |                 |                        |                         |                         | Outs, good stand 5" high          |





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**UNITED STATES DEPARTMENT OF AGRICULTURE**  
**SOIL CONSERVATION SERVICE**  
**DIVISION OF RESEARCH**

Month Mar. & Apr., 1939

Project SCS Experiment Station, Tyler, Texas

**RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS**

Sheet 4 of 13 SHEETS

| Date     | Watershed |              |           | Rainfall       |                    |                 |                               | Temperature (degrees F)        |                                |         | Run-off |              |                 |                  | Rainfall Means (inches) | Ry. Low (one per acre) | Condition of Watershed             |      |
|----------|-----------|--------------|-----------|----------------|--------------------|-----------------|-------------------------------|--------------------------------|--------------------------------|---------|---------|--------------|-----------------|------------------|-------------------------|------------------------|------------------------------------|------|
|          | Number    | Area (acres) | Open Sta. | Depth (inches) | Duration (minutes) | Amount (inches) | Maximum Intensity             |                                |                                | Maximum | Minimum | Rapid (feet) | Amount (inches) | Maximum Rate     |                         |                        |                                    |      |
|          |           |              |           |                |                    |                 | 6 minutes (duration per hour) | 12 minutes (duration per hour) | 30 minutes (duration per hour) |         |         |              |                 | Cu. ft. per sec. |                         |                        |                                    | Time |
| (1)      | (2)       | (3)          | (4)       | (5)            | (6)                | (7)             | (8)                           | (9)                            | (10)                           | (11)    | (12)    | (13)         | (14)            | (15)             | (16)                    | (17)                   | (18)                               |      |
| March 25 | 3         | 7.936        | 19        | 1.04AM         | 15                 | 0.11            | 0.60                          | 0.64                           | 0.22                           | 68      | 55      |              |                 |                  |                         |                        | Woods (oaks in bud)                |      |
|          | 4         | 5.747        | 10-F-C    | 1.00AM         | 10                 | 0.16            | 1.20                          | 0.64                           | 0.32                           | 68      | 55      |              |                 |                  |                         |                        | Oats turned under; corn planted    |      |
|          | 5         | 1.57         | 12-F-A    | 1.00AM         | 16                 | 0.16            | 0.96                          | 0.60                           | 0.32                           | 68      | 55      |              |                 |                  |                         |                        | Oats, good stand 10" vetch 5" fair |      |
| March 25 | 3         | 7.936        | 19        | 9.16AM         | 320                | 0.54            | 0.96                          | 0.56                           | 0.30                           | 68      | 55      |              |                 |                  |                         |                        | Woods (oaks in bud)                |      |
|          | 4         | 5.747        | 10-F-C    | 9.04PM         | 330                | 0.61            | 0.96                          | 0.56                           | 0.32                           | 68      | 55      |              |                 |                  |                         |                        | Recently planted in corn           |      |
|          | 5         | 1.57         | 12-F-A    | 9.05AM         | 325                | 0.62            | 1.20                          | 0.68                           | 0.36                           | 68      | 55      |              |                 |                  |                         |                        | Oats, good stand 10" vetch 5" fair |      |
| March 28 | 3         | 7.936        | 19        | 12.10AM        | 10                 | 0.29            | 2.40                          | 1.16                           | 0.58                           | 79      | 57      |              |                 |                  |                         |                        | Woods (oaks in bud)                |      |
|          | 4         | 5.747        | 10-F-C    | 12.10AM        | 23                 | 0.26            | 2.28                          | 1.00                           | 0.52                           | 79      | 57      |              | 0.005           | No rate          |                         | .255                   | Corn good stand 1 1/2" high        |      |
|          | 5         | 1.57         | 12-F-A    | 12.14AM        | 23                 | 0.13            | 1.20                          | .48                            | 0.26                           | 79      | 57      |              |                 |                  |                         |                        | Oats, good stand 10" vetch 5" fair |      |
| March 28 | 3         | 7.936        | 19        | 1.08.53PM      | 45                 | 0.25            | 0.96                          | 0.64                           | 0.50                           | 79      | 57      |              |                 |                  |                         |                        | Woods (oaks in bud)                |      |
|          | 4         | 5.747        | 10-F-C    | 8.53PM         | 45                 | 0.24            | 0.84                          | 0.56                           | 0.38                           | 79      | 57      |              | 0.004           | No rate          |                         | .236                   | Corn good stand 1 1/2" high        |      |
|          | 5         | 1.57         | 12-F-A    | 8.55PM         | 45                 | 0.24            | 0.96                          | 0.48                           | 0.36                           | 79      | 57      |              |                 |                  |                         |                        | Oats, good stand 10" vetch 5" fair |      |
| April 4  | 3         | 7.936        | 19        |                |                    | 0.02            |                               |                                |                                | 76      | 63      |              |                 |                  |                         |                        | Woods (oaks in full leaf)          |      |
|          | 4         | 5.747        | 10-F-C    |                |                    | 0.02            |                               |                                |                                | 76      | 63      |              |                 |                  |                         |                        | Corn good stand 2 1/2" high        |      |
|          | 5         | 1.57         | 12-F-A    |                |                    | 0.02            |                               |                                |                                | 76      | 63      |              |                 |                  |                         |                        | Oats, good stand 10" vetch 5" fair |      |
| April 5  | 3         | 7.936        | 19        | 2.49PM         | 3                  | 0.02            | 0.36                          | 0.12                           | 0.06                           | 76      | 62      |              |                 |                  |                         |                        | Woods (oaks in full leaf)          |      |
|          | 3         | 7.936        | 19        | 4.56PM         | 65                 | 0.47            | 1.68                          | 0.92                           | 0.76                           | 76      | 62      |              |                 |                  |                         |                        | Woods (oaks in full leaf)          |      |
|          | 4         | 5.747        | 10-F-C    | 2.45PM         | 3                  | 0.02            | 0.24                          | 0.08                           | 0.04                           | 76      | 62      |              |                 |                  |                         |                        | Corn good stand 2 1/2" high        |      |
| April 5  | 4         | 5.747        | 10-F-C    | 4.52PM         | 65                 | 0.47            | 1.80                          | 0.92                           | 0.76                           | 76      | 62      |              |                 | Slit box         |                         | .469                   | Corn good stand 2 1/2" high        |      |
|          | 5         | 1.57         | 12-F-C    | 2.45PM         | 5                  | 0.02            | 2.04                          | 1.04                           | 0.86                           | 76      | 62      |              |                 | Slit box         |                         | .040                   | Oats good stand 10" vetch 5" fair  |      |
|          | 5         | 1.57         | 12-F-C    | 4.53PM         | 67                 | 0.53            | 2.04                          | 1.04                           | 0.86                           | 76      | 62      |              |                 | Slit box         |                         | .004                   | Oats good stand 10" vetch 5" fair  |      |
| April 10 | 3         | 7.936        | 19        | 9.25PM         | 75                 | 0.56            | 1.92                          | 1.24                           | 0.98                           | 79      | 61      |              |                 |                  |                         |                        | Woods (oaks in full leaf)          |      |
|          | 3         | 7.936        | 19        | 2.10AM         | 15                 | 0.02            | 2/                            | 0.08                           | 0.04                           | 76      | 52      |              |                 |                  |                         |                        | Woods (oaks in full leaf)          |      |
|          | 4         | 5.747        | 10-F-C    | 9.23PM         | 70                 | 0.55            | 2.40                          | 1.36                           | 0.90                           | 79      | 61      |              |                 |                  |                         |                        | Corn good stand, 3" cultivated 8"  |      |
| April 10 | 4         | 5.747        | 10-F-C    | 2.10AM         | 15                 | 0.02            | 2/                            | 0.08                           | 0.04                           | 76      | 52      |              |                 | 1.40AM           |                         | .502                   | Corn good stand, 3" cultivated 8"  |      |
|          | 4         | 5.747        | 10-F-C    | 2.10AM         | 15                 | 0.02            | 2.40                          | 1.36                           | 0.90                           | 79      | 61      |              | 0.068           |                  |                         | .364                   | Oats 12" good; vetch 9" fair       |      |
|          | 5         | 1.57         | 12-F-A    | 9.50AM         | 60                 | 0.40            | 2.28                          | 1.08                           | 0.66                           | 79      | 61      |              |                 |                  |                         |                        | Oats 12" good; vetch 9" fair       |      |
| April 10 | 5         | 1.57         | 12-F-A    | 2.10AM         | 15                 | 0.02            | 2/                            | 0.08                           | 0.04                           | 76      | 52      |              |                 | Slit box         |                         | .416                   |                                    |      |
|          | 5         | 1.57         | 12-F-A    | 2.10AM         | 15                 | 0.02            | 2.40                          | 1.36                           | 0.90                           | 79      | 61      |              | 0.004           | No rate          |                         | .000                   |                                    |      |



# RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date     | Weathered |              |          | Rainfall         |                 |                             |                              | Temperature (degrees F)      |                 | Run-off        |                 |              |        | Run-off Rate (inches) | River Level (feet per acre) | Remarks                                    |
|----------|-----------|--------------|----------|------------------|-----------------|-----------------------------|------------------------------|------------------------------|-----------------|----------------|-----------------|--------------|--------|-----------------------|-----------------------------|--------------------------------------------|
|          | Number    | Area (acres) | Oggs No. | Duration (hours) | Amount (inches) | Maximum Intensity           |                              |                              | Amount (inches) | Killed (hours) | Amount (inches) | Maximum Rate |        |                       |                             |                                            |
|          |           |              |          |                  |                 | 4 minutes (inches per hour) | 10 minutes (inches per hour) | 30 minutes (inches per hour) |                 |                |                 | On R. sec.   | Time   |                       |                             |                                            |
| (1)      | (2)       | (3)          | (4)      | (5)              | (6)             | (7)                         | (8)                          | (9)                          | (10)            | (11)           | (12)            | (13)         | (14)   | (15)                  | (16)                        | (17)                                       |
| 1939     |           |              |          |                  |                 |                             |                              |                              |                 |                |                 |              |        |                       |                             |                                            |
| April 13 | 3         | 7.936        | 19-C-19  | 21:30PM          | 30              | 0.24                        | 0.84                         | 0.56                         | 0.48            | 57             | 49              |              |        |                       |                             |                                            |
| April 13 | 4         | 5.747        | 10-F-C   | 21:35PM          | 31              | 0.32                        | 1.20                         | 0.68                         | 0.62            | 67             | 49              | 1.24         | 3:40PM |                       |                             | Woods (oaks in full leaf)                  |
| April 13 | 5         | 1.57         | 12-F-A   | 21:35PM          | 35              | 0.42                        | 1.44                         | 1.16                         | 0.78            | 67             | 49              | No data      |        |                       |                             | Corn good stand 4" high                    |
|          |           |              |          |                  |                 |                             |                              |                              |                 |                |                 |              |        |                       |                             | Corn 15" good; vetch 10" fair              |
| April 16 | 3         | 7.936        | 19       | 6:30AM           | 265             | 0.57                        | 3.36                         | 1.40                         | 0.78            | 77             | 58              |              |        |                       |                             | Woods (oaks in full leaf)                  |
| April 16 | 3         | 7.936        | 19       | 4:45PM           | 28              | 0.12                        | 0.68                         | 0.68                         | 0.08            | 77             | 58              |              |        |                       |                             | Woods (oaks in full leaf)                  |
| April 16 | 3         | 7.936        | 19       | 7:05PM           | 20              | 0.09                        | 0.24                         | 0.12                         | 0.08            | 77             | 58              |              |        |                       |                             | Woods (oaks in full leaf)                  |
| April 16 | 4         | 5.747        | 10-F-C   | 6:22AM           | 260             | 0.70                        | 3.84                         | 1.60                         | 0.88            | 77             | 58              | 16.90        | 7:23AM |                       |                             | Corn good stand 4" high                    |
| April 16 | 4         | 5.747        | 10-F-C   | 5:03PM           | 15              | 0.04                        | 0.24                         | 0.16                         | 0.08            | 77             | 58              |              |        |                       |                             | Corn good stand 4" high                    |
| April 16 | 4         | 5.747        | 10-F-C   | 7:02PM           | 80              | 0.11                        | 0.24                         | 0.12                         | 0.10            | 77             | 58              |              |        |                       |                             | Corn good stand 4" high                    |
| April 16 | 5         | 1.57         | 12-F-A   | 6:25AM           | 260             | 0.78                        | 2.52                         | 1.16                         | 0.68            | 77             | 58              |              |        |                       |                             | Oats 18" good; vetch 12" fair              |
| April 16 | 5         | 1.57         | 12-F-A   | 5:07PM           | 10              | 0.03                        | 0.24                         | 0.12                         | 0.06            | 77             | 58              |              |        |                       |                             | Oats 18" good; vetch 12" fair              |
| April 16 | 5         | 1.57         | 12-F-A   | 7:10PM           | 70              | 0.10                        | 0.24                         | 0.12                         | 0.08            | 77             | 58              | No data      |        |                       |                             | Oats 18" good; vetch 12" fair              |
|          |           |              |          |                  |                 | 0.67                        |                              |                              |                 |                |                 |              |        |                       |                             |                                            |
| April 27 | 3         | 7.936        | 19       | 1:58AM           | 96              | 0.48                        | 2.88                         | 1.36                         | 0.70            | 82             | 61              |              |        |                       |                             | Woods (oaks in full leaf)                  |
| April 27 | 4         | 5.747        | 10-F-C   | 1:58AM           | 112             | 0.46                        | 2.64                         | 1.28                         | 0.66            | 82             | 61              |              |        |                       |                             | Corn good stand, cult'd April 26           |
| April 27 | 5         | 1.57         | 12-F-A   | 2:00AM           | 95              | 0.27                        | 2.16                         | 0.88                         | 0.44            | 82             | 61              |              |        |                       |                             | Oats 26" good; vetch plowed under April 25 |
| April 27 | 3         | 7.936        | 19       | 5:05AM           | 47              | 0.11                        | 0.24                         | 0.16                         | 0.12            | 82             | 61              |              |        |                       |                             | Woods (oaks in full leaf)                  |
| April 27 | 4         | 5.747        | 10-F-C   | 4:57AM           | 55              | 0.10                        | 0.24                         | 0.16                         | 0.12            | 82             | 61              |              |        |                       |                             | Corn good stand, cult'd April 26           |
| April 27 | 5         | 1.57         | 12-F-A   | 5:00AM           | 55              | 0.12                        | 0.24                         | 0.16                         | 0.12            | 82             | 61              |              |        |                       |                             | Oats 26" good; vetch plowed under April 25 |
| May 7    | 3         | 7.936        | 19       | 7:05PM           | 35              | 0.04                        |                              |                              |                 | 79             | 60              |              |        |                       |                             | Woods (oaks in full leaf)                  |
| May 7    | 4         | 5.747        | 10-F-C   | 5:57PM           | 103             | 0.04                        |                              |                              |                 | 79             | 60              |              |        |                       |                             | Corn good stand 12" cult'd May 6           |
| May 7    | 5         | 1.57         | 12-F-A   | 6:45PM           | 55              | 0.04                        |                              |                              |                 | 79             | 60              |              |        |                       |                             | Oats 36" good; remaining strips disked     |
| May 7    | 3         | 7.936        | 19       | 9:46PM           | 194             | 0.27                        | 0.48                         | 0.36                         | 0.24            | 79             | 60              |              |        |                       |                             | Woods (oaks in full leaf)                  |
| May 7    | 4         | 5.747        | 10-F-C   | 9:46PM           | 222             | 0.28                        | 0.48                         | 0.48                         | 0.32            | 79             | 60              |              |        |                       |                             | Corn good stand 12"                        |
| May 7    | 5         | 1.57         | 12-F-A   | 9:47PM           | 183             | 0.32                        | 0.72                         | 0.56                         | 0.32            | 79             | 60              |              |        |                       |                             | Oats 36" good stand                        |
| May 8    | 3         | 7.936        | 19       | 1:05PM           | 25              | 0.03                        |                              |                              |                 | 80             | 56              |              |        |                       |                             | Woods (oaks in full leaf)                  |
| May 8    | 4         | 5.747        | 10-F-C   | 1:05PM           | 20              | 0.03                        |                              |                              |                 |                |                 |              |        |                       |                             |                                            |





UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 MONTH May & June, 19 30  
 SHEET 6 OF 13 PAGES

 PROJECT 803 Experiment Station, Tyler, Texas  
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date   | WATERSHED |              |           | RAINFALL     |                    |                 |                             |                              | TEMPERATURE (degrees F.)     |         |         | RUN-OFF       |                 |              |      | RAINFALL METER (inches) | Base Loss (cfs per acre) | CONDITION OF WATERSHED                                                                                  |
|--------|-----------|--------------|-----------|--------------|--------------------|-----------------|-----------------------------|------------------------------|------------------------------|---------|---------|---------------|-----------------|--------------|------|-------------------------|--------------------------|---------------------------------------------------------------------------------------------------------|
|        | Number    | Area (acres) | Gage No.  | Begin (hour) | Duration (minutes) | Amount (inches) | MAXIMUM INTENSITY           |                              |                              | Maximum | Minimum | Inches (hour) | Amount (inches) | MAXIMUM RATE |      |                         |                          |                                                                                                         |
|        |           |              |           |              |                    |                 | 4 minutes (inches per hour) | 15 minutes (inches per hour) | 30 minutes (inches per hour) |         |         |               |                 | Cu. ft. sec. | Time |                         |                          |                                                                                                         |
| (1)    | (2)       | (3)          | (4)       | (5)          | (6)                | (7)             | (8)                         | (9)                          | (10)                         | (11)    | (12)    | (13)          | (14)            | (15)         | (16) | (17)                    | (18)                     | (19)                                                                                                    |
| May 13 | 3         | 7.936        | 19-C-1912 | 12:45 PM     | 15                 | 0.08            |                             |                              |                              | 82      | 66      | NRO           |                 |              |      |                         |                          | Woods (oaks in full leaf)<br>Corn good stand 12"<br>Oats 36" good stand                                 |
|        | 4         | 5.747        | 10-F-C    | 12:45 PM     | 10                 | 0.08            | 0.72                        | 0.32                         | 0.16                         | 82      | 66      | NRO           |                 |              |      |                         |                          |                                                                                                         |
|        | 5         | 1.57         | 12-F-A    | 12:47 PM     | 5                  | 0.06            |                             |                              |                              | 82      | 66      | NRO           |                 |              |      |                         |                          |                                                                                                         |
| May 16 | 3         | 7.936        | 19        | 9:10 PM      | 110                | 0.14            | 0.48                        | 0.24                         | 0.18                         | 81      | 65      | NRO           |                 |              |      |                         |                          | Woods (oaks in full leaf)<br>Corn good stand 18"<br>Oats 36" good; cotton planted May 15                |
|        | 4         | 5.747        | 7-P-A     | 9:03 PM      | 114                | 0.14            | 0.60                        | 0.28                         | 0.20                         | 81      | 65      | NRO           |                 |              |      |                         |                          |                                                                                                         |
|        | 5         | 1.57         | 12-F-A    | 9:22 PM      | 98                 | 0.15            | 0.72                        | 0.28                         | 0.22                         | 81      | 65      | NRO           |                 |              |      |                         |                          |                                                                                                         |
| May 17 | 3         | 7.936        | 19        | 3:34 AM      | 330                | 0.38            | 0.24                        | 0.20                         | 0.12                         | 79      | 62      | NRO           |                 |              |      |                         |                          | Woods (oaks in full leaf)<br>Corn good stand 18"<br>Oats 36" good; cotton planted May 15                |
|        | 4         | 5.747        | 7-P-A     | 3:16 AM      | 466                | 0.42            | 0.24                        | 0.16                         | 0.12                         | 79      | 62      | NRO           |                 |              |      |                         |                          |                                                                                                         |
|        | 5         | 1.57         | 12-F-A    | 3:30 AM      | 420                | 0.39            | 0.36                        | 0.16                         | 0.12                         | 79      | 62      | NRO           |                 |              |      |                         |                          |                                                                                                         |
| May 18 | 3         | 7.936        | 19        | 12:00 AM     | 35                 | 0.69            | 2.88                        | 1.84                         | 1.26                         | 82      | 65      | NRO           |                 |              |      |                         |                          | Woods (oaks in full leaf)<br>Corn good 21" high<br>Strip cropped; oats 38"; cotton not up               |
|        | 4         | 5.747        | 10-F-C    | 12:00 AM     | 45                 | 0.65            | 2.40                        | 1.64                         | 1.20                         | 82      | 65      | Silt box      | 0.017           | No rate      |      | 0.633                   | 0.148                    |                                                                                                         |
|        | 5         | 1.57         | 12-F-A    | 12:00 AM     | 40                 | 0.52            | 2.40                        | 1.44                         | 0.96                         | 82      | 65      | Silt box      | 0.004           | No rate      |      | 0.516                   | 0.003                    |                                                                                                         |
| May 20 | 3         | 7.936        | 19        | 1:46 AM      | 42                 | 0.76            | 2.88                        | 2.40                         | 1.42                         | 87      | 65      | NRO           |                 |              |      |                         |                          | Woods (oaks in full leaf)<br>Corn good stand 24" high<br>Oats 36" good; cotton emerging                 |
|        | 4         | 5.747        | 10-F-C    | 1:45 AM      | 62                 | 0.76            | 3.24                        | 2.40                         | 1.48                         | 87      | 65      | 1:51 AM       | 2:52 AM         | 0.206        | 9.27 | 2:02 AM                 | 5.415                    |                                                                                                         |
|        | 5         | 1.57         | 12-F-A    | 1:45 AM      | 45                 | 0.72            | 3.00                        | 2.28                         | 1.32                         | 87      | 65      | 1:51 AM       | 6:52 AM         | 0.257        | .66  | 2:04 AM                 | 0.629                    |                                                                                                         |
| May 25 | 3         | 7.936        | 19        | 5:22 PM      | 75                 | 0.29            | 1.44                        | 0.56                         | 0.44                         | 87      | 68      | NRO           |                 |              |      |                         |                          | Woods (oaks in full leaf)<br>Corn good stand 3" high<br>Oats 36" good; cotton 1" good                   |
|        | 4         | 5.747        | 10-F-C    | 5:23 PM      | 72                 | 0.28            | 1.44                        | 0.60                         | 0.48                         | 87      | 60      | NRO           |                 |              |      |                         |                          |                                                                                                         |
|        | 5         | 1.57         | 12-F-A    | 5:25 PM      | 70                 | 0.28            | 1.56                        | 0.72                         | 0.48                         | 87      | 60      | NRO           |                 |              |      |                         |                          |                                                                                                         |
| May 27 | 3         | 7.936        | 19        | 4:40 PM      | 30                 | 0.26            | 1.44                        | 0.56                         | 0.52                         | 90      | 67      | NRO           |                 |              |      |                         |                          | Woods (oaks in full leaf)<br>Corn good stand 3"; cult'd May 26<br>Oats 36" good; cotton 1" good         |
|        | 4         | 5.747        | 10-F-C    | 4:40 PM      | 35                 | 0.27            | 1.80                        | 0.68                         | 0.52                         | 90      | 67      | NRO           |                 |              |      |                         |                          |                                                                                                         |
|        | 5         | 1.57         | 12-F-A    | 4:37 PM      | 40                 | 0.26            | 1.44                        | 0.68                         | 0.54                         | 90      | 67      | NRO           |                 |              |      |                         |                          |                                                                                                         |
| June 2 | 3         | 7.936        | 19        | 9:38 PM      | 95                 | 0.25            | 0.24                        | 0.20                         | 0.18                         | 84      | 66      | NRO           |                 |              |      |                         |                          | Woods (oaks in full leaf)<br>Corn good stand 4" high<br>Oats harvested May 30; cotton cultivated June 2 |
|        | 4         | 5.747        | 10-F-C    | 7:15 PM      | 217                | 0.25            | 0.24                        | 0.20                         | 0.20                         | 84      | 66      | NRO           |                 |              |      |                         |                          |                                                                                                         |
|        | 5         | 1.57         | 12-F-A    | 7:45 PM      | 215                | 0.26            | 0.24                        | 0.20                         | 0.20                         | 84      | 66      | NRO           |                 |              |      |                         |                          |                                                                                                         |
| June 4 | 3         | 7.936        | 19        | 4:52 AM      | 10                 | 0.02            |                             |                              |                              | 81      | 67      | NRO           |                 |              |      |                         |                          | Woods (oaks in full leaf)<br>Corn good stand 4" high<br>Oats stubble 14"; cotton 3" good                |
|        | 4         | 5.747        | 10-F-C    | 4:54 AM      | 18                 | 0.02            |                             |                              |                              | 81      | 67      | NRO           |                 |              |      |                         |                          |                                                                                                         |
|        | 5         | 1.57         | 12-F-A    | 4:56 AM      | 7                  | 0.02            |                             |                              |                              | 81      | 67      | NRO           |                 |              |      |                         |                          |                                                                                                         |



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

 Month June , 19 39  
 Sheet 7 of 13 SHEETS

 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS  
 Project SCS Experiment Station, Tyler, Texas

| Date    | Watershed |              | Rainfall   |              |                    |                 | Temperature (degrees F.)  |                         | Run-off                 |                |                 | Run-off Minors (cubic feet) | Run-off (cubic feet) | Run-off (cubic feet) | Condition of Watershed                                                                                        |
|---------|-----------|--------------|------------|--------------|--------------------|-----------------|---------------------------|-------------------------|-------------------------|----------------|-----------------|-----------------------------|----------------------|----------------------|---------------------------------------------------------------------------------------------------------------|
|         | Number    | Area (acres) | Obs. N. x. | Hours (hour) | Duration (minutes) | Amount (inches) | Maximum Intensity         |                         |                         | Total (inches) | Excess (inches) | Amount (inches)             | Time                 | Cu. ft. sec.         | Time                                                                                                          |
|         |           |              |            |              |                    |                 | 1/2 in. (inches per hour) | 1 in. (inches per hour) | 2 in. (inches per hour) |                |                 |                             |                      |                      |                                                                                                               |
| 1939    | (1)       | (2)          | (3)        | (4)          | (5)                | (6)             | (7)                       | (8)                     | (9)                     | (10)           | (11)            | (12)                        | (13)                 | (14)                 | (15)                                                                                                          |
| June 4  | 3         | 7,936        | 19-C-19    | 5:55PM       | 260                | 0.60            | 2.64                      | 1.44                    | 0.84                    |                |                 | NRO                         |                      |                      | Woods (oaks in full leaf)<br>Corn 4' good stand<br>Oats stubble 14"; cotton 3"<br>Oats stubble 14"; cotton 3" |
| June 4  | 4         | 5,747        | 10-F-C     | 5:54PM       | 265                | 0.58            | 2.16                      | 1.44                    | 0.82                    |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 4  | 5         | 1,557        | 12-F-A     | 5:52PM       | 53                 | 0.57            | 3.12                      | 1.60                    | 1.00                    |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 4  | 5         | 1,557        | 12-F-A     | 7:34PM       | 177                | 0.08            |                           |                         |                         |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 12 | 3         | 7,936        | 19         |              |                    | Trace           |                           |                         |                         |                |                 | NRO                         |                      |                      | Woods (oaks in full leaf)<br>Corn 5' good stand<br>Oats stubble 14"; cotton 4"                                |
| June 12 | 4         | 5,747        | 10-F-C     |              |                    | Trace           |                           |                         |                         |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 12 | 5         | 1,557        | 12-F-A     |              |                    | 0.01            |                           |                         |                         |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 18 | 3         | 7,936        | 19         | 12:05PM      | 7                  | 0.08            | 1.32                      | 0.44                    | 0.22                    |                |                 | NRO                         |                      |                      | Woods (oaks in full leaf)<br>Corn 6' good stand<br>Oats stubble 14"; cotton 6"<br>Cult'd June 15              |
| June 18 | 4         | 5,747        | 10-F-C     | 12:42PM      | 4                  | 0.11            |                           |                         |                         |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 18 | 5         | 1,557        | 12-F-A     | 12:13PM      | 7                  | 0.09            |                           |                         |                         |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 19 | 3         | 7,936        | 19         | 2:06AM       | 163                | 0.34            |                           |                         |                         |                |                 | NRO                         |                      |                      | Woods (oaks in full leaf)<br>Corn 6' good stand<br>Strip cropped; oat stubble 14"<br>Cotton 6"                |
| June 19 | 4         | 5,747        | 10-F-C     | 1:57AM       | 180                | 0.34            | 0.48                      | 0.28                    | 0.20                    |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 19 | 5         | 1,557        | 12-F-A     | 2:04AM       | 171                | 0.30            | 0.60                      | 0.36                    | 0.25                    |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 19 | 3         | 7,936        | 19         |              |                    | 0.03            |                           |                         |                         |                |                 | NRO                         |                      |                      | Woods (oaks in full leaf)<br>Corn 6' good stand<br>Oats stubble 14"; cotton 6"                                |
| June 19 | 4         | 5,747        | 10-F-C     |              |                    | 0.02            |                           |                         |                         |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 19 | 5         | 1,557        | 12-F-A     |              |                    | 0.03            |                           |                         |                         |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 19 | 3         | 7,936        | 19         | 12:55PM      | 90                 | 0.53            | 3.84                      | 1.60                    | 0.86                    |                |                 | NRO                         |                      |                      | Woods (oaks in full leaf)<br>Woods (oaks in full leaf)                                                        |
| June 20 | 3         | 7,936        | 19         | 12:20PM      | 30                 | 0.32            | 1.68                      | 0.60                    | 0.64                    |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 20 | 4         | 5,747        | 10-F-C     | 12:52PM      | 95                 | 0.52            | 3.60                      | 1.60                    | 0.88                    |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 20 | 4         | 5,747        | 10-F-C     | 12:20PM      | 30                 | 0.36            | 1.80                      | 1.04                    | 0.72                    |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 20 | 5         | 1,557        | 12-F-A     | 12:55PM      | 150                | 0.48            | 2.88                      | 1.20                    | 0.62                    |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 20 | 5         | 1,557        | 12-F-A     | 12:22PM      | 30                 | 0.32            | 1.92                      | 0.88                    | 0.64                    |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 20 | 5         | 1,557        | 12-F-A     |              |                    | 0.72            |                           |                         |                         |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 21 | 3         | 7,936        | 19         |              |                    | 0.06            |                           |                         |                         |                |                 | NRO                         |                      |                      | Woods (oaks in full leaf)<br>Corn 6' good stand<br>Oats stubble 14"; cotton 6"                                |
| June 21 | 4         | 5,747        | 10-F-C     |              |                    | 0.05            |                           |                         |                         |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 21 | 5         | 1,557        | 12-F-A     |              |                    | 0.03            |                           |                         |                         |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 29 | 3         | 7,936        | 19         | 4:45PM       | 40                 | 0.17            | 0.84                      | 0.56                    | 0.30                    |                |                 | NRO                         |                      |                      | Woods (oaks in full leaf)<br>Woods (oaks in full leaf)                                                        |
| June 29 | 3         | 7,936        | 19         | 7:40PM       | 165                | 0.48            | 0.72                      | 0.64                    | 0.56                    |                |                 | NRO                         |                      |                      |                                                                                                               |
| June 29 | 3         | 7,936        | 19         |              |                    | 0.65            |                           |                         |                         |                |                 | NRO                         |                      |                      |                                                                                                               |





**UNITED STATES DEPARTMENT OF AGRICULTURE**  
**SOIL CONSERVATION SERVICE**  
 DIVISION OF RESEARCH

MONTH June, July, & Aug., 1939  
 SHEET 8 OF 13 SHEETS

**RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS**

Project 8C3 Experiment Station, Tyler, Texas

| Date    | Watershed |                 | Rainfall  |                |                       |                    |                                |                                 |                                 | Temperature<br>(degrees F.) |         | Run-off        |                 |                    |              | Rainfall minus<br>(100-yrp)<br>(inches) | Soil Loss<br>(tons per acre) | Condition of Watershed                               |      |
|---------|-----------|-----------------|-----------|----------------|-----------------------|--------------------|--------------------------------|---------------------------------|---------------------------------|-----------------------------|---------|----------------|-----------------|--------------------|--------------|-----------------------------------------|------------------------------|------------------------------------------------------|------|
|         | Number    | Area<br>(acres) | Stage No. | Time<br>(hour) | Duration<br>(minutes) | Amount<br>(inches) | Maximum Intensity              |                                 |                                 | Maximum                     | Minimum | Peak<br>(hour) | Flood<br>(hour) | Amount<br>(inches) | Maximum Rate |                                         |                              |                                                      |      |
|         |           |                 |           |                |                       |                    | 8 minutes<br>(inches per hour) | 15 minutes<br>(inches per hour) | 30 minutes<br>(inches per hour) |                             |         |                |                 |                    | Cu. ft. sec  |                                         |                              |                                                      | Time |
| 1939    | (1)       | (2)             | (3)       | (4)            | (5)                   | (6)                | (7)                            | (8)                             | (9)                             | (10)                        | (11)    | (12)           | (13)            | (14)               | (15)         | (16)                                    | (17)                         | (18)                                                 |      |
| June 29 | 4         | 5.747           | 10-F-C    | 4:44PM         | 35                    | 0.20               |                                | 0.84                            | 0.56                            | 0.32                        | 97      | 74             |                 |                    |              |                                         |                              | Corn good; 7' high                                   |      |
| June 29 | 4         | 5.747           | 10-F-C    | 7:37PM         | 160                   | 0.43               |                                | 0.96                            | 0.72                            | 0.56                        | 97      | 74             |                 |                    |              |                                         |                              | Corn good; 7' high                                   |      |
| June 29 | 5         | 1.57            | 12-F-A    | 4:10PM         | 70                    | 0.24               |                                | 1.08                            | 0.52                            | 0.32                        | 97      | 74             |                 | box                | 0.022        |                                         | 0.658                        | Out stubble 14" cotton cult'd                        |      |
| June 29 | 5         | 1.57            | 12-F-A    | 7:40PM         | 160                   | 0.68               |                                | 1.92                            | 1.36                            | 1.04                        | 97      | 74             |                 |                    |              |                                         |                              | June 22-29; Out stubble 14" cotton cult'd June 22-29 |      |
| July 1  | 3         | 7.936           | 19-C-19   |                |                       | Trace              |                                |                                 |                                 |                             | 92      | 71             |                 |                    |              |                                         |                              | Woods (oaks in full leaf)                            |      |
| July 2  | 3         | 7.936           | 19-C-19   | 5:15AM         | 100                   | 0.94               |                                | 2.52                            | 1.76                            | 1.44                        | 91      | 65             |                 |                    |              |                                         |                              | Woods (oaks in full leaf)                            |      |
| July 1  | 4         | 5.747           | 10-F-C    |                |                       | Trace              |                                |                                 |                                 |                             | 92      | 71             |                 |                    |              |                                         |                              | Corn 7'; good stand                                  |      |
| July 2  | 4         | 5.747           | 10-F-C    | 5:10AM         | 102                   | 0.91               |                                | 2.76                            | 1.84                            | 1.44                        | 91      | 65             | 5:26AM          | 9:25AM             | 0.368        | 4.81                                    | 5:32AM                       | Corn 7'; good stand                                  |      |
| July 1  | 5         | 1.57            | 12-F-A    | 9:54PM         | 18                    | 0.09               |                                | 0.72                            | 0.32                            | 0.16                        | 92      | 71             |                 |                    |              |                                         |                              | Cotton 12" good; out stubble 14"                     |      |
| July 2  | 5         | 1.57            | 12-F-A    | 5:12AM         | 105                   | 1.04               |                                | 3.00                            | 2.24                            | 1.68                        | 91      | 65             |                 | box                | 0.034        |                                         |                              | Cotton 12" good; out stubble 14"                     |      |
| July 9  | 3         | 7.936           | 19        | 2:32PM         | 108                   | 2.05               |                                | 7.56                            | 5.36                            | 3.24                        | 98      | 72             |                 |                    |              |                                         |                              |                                                      |      |
| July 9  | 4         | 5.747           | 10-F-C    | 2:32PM         | 98                    | 2.10               |                                | 7.56                            | 5.28                            | 3.16                        | 98      | 72             | 2:40PM          | 4:12PM             | 0.003        |                                         | 2.047                        | Woods (oaks in full leaf)                            |      |
| July 9  | 5         | 1.57            | 12-F-A    | 2:45PM         | 115                   | 1.93               |                                | 6.24                            | 3.84                            | 2.40                        | 98      | 72             | 2:43PM          | 5:15PM             | 0.782        | 26.77                                   | 2:47PM                       | Corn 7'; good stand                                  |      |
| July 23 | 3         | 7.936           | 19        | 5:42AM         | 15                    | 0.08               |                                |                                 |                                 |                             | 95      | 70             |                 |                    |              |                                         |                              | Out stubble 14" cotton 15" good                      |      |
| July 23 | 4         | 5.747           | 10-F-C    | 5:45AM         | 14                    | 0.08               |                                | 0.52                            | 0.16                            |                             | 95      | 70             |                 |                    |              |                                         |                              | Cult'd July 8                                        |      |
| July 23 | 5         | 1.57            | 12-F-A    | 5:50AM         | 10                    | 0.06               |                                |                                 |                                 |                             | 95      | 70             |                 |                    |              |                                         |                              | Woods (oaks in full leaf)                            |      |
| July 28 | 3         | 7.936           | 19        | 6:15PM         | 15                    | 0.05               |                                |                                 |                                 |                             | 100     | 75             |                 |                    |              |                                         |                              | Corn 7'; good stand                                  |      |
| July 28 | 3         | 7.936           | 19        | 8:12PM         | 235                   | 0.29               |                                | 0.95                            | 0.56                            | 0.34                        | 100     | 75             |                 |                    |              |                                         |                              | Out stubble 14" cotton 22" good                      |      |
| July 28 | 4         | 5.747           | 10-F-C    | 6:05PM         | 30                    | 0.08               |                                | 0.96                            | 0.64                            | 0.40                        | 100     | 75             |                 |                    |              |                                         |                              | cult'd July 18                                       |      |
| July 28 | 4         | 5.747           | 10-F-C    | 8:10PM         | 225                   | 0.29               |                                | 0.96                            | 0.64                            | 0.40                        | 100     | 75             |                 |                    |              |                                         |                              | Woods (oaks in full leaf)                            |      |
| July 28 | 5         | 1.57            | 12-F-A    | 6:00PM         | 30                    | 0.09               |                                | 1.20                            | 0.64                            | 0.50                        | 100     | 75             |                 |                    |              |                                         |                              | Woods (oaks in full leaf)                            |      |
| July 28 | 5         | 1.57            | 12-F-A    | 8:07PM         | 195                   | 0.36               |                                |                                 |                                 |                             | 100     | 75             |                 |                    |              |                                         |                              | Woods (oaks in full leaf)                            |      |
| Aug. 3  | 3         | 7.936           | 19-C-19   | 3:00PM         | 7                     | 0.03               |                                |                                 |                                 |                             | 94      | 72             |                 |                    |              |                                         |                              | Corn dormant; crab grass                             |      |
| Aug. 3  | 4         | 5.747           | 10-F-C    | 3:00PM         | 10                    | 0.05               |                                | 0.20                            |                                 | 0.10                        | 94      | 72             |                 |                    |              |                                         |                              | Strip cropped cotton 26" late                        |      |
| Aug. 3  | 5         | 1.57            | 12-F-A    | 2:57PM         | 12                    | 0.07               |                                |                                 |                                 |                             | 94      | 72             |                 |                    |              |                                         |                              | stubble turned under                                 |      |
| Aug. 14 | 3         | 7.936           | 19        | No record      |                       | 0.11               |                                | See #7-F-4                      |                                 |                             | 103     | 72             |                 |                    |              |                                         |                              | Woods (oaks in full leaf)                            |      |
| Aug. 14 | 4         | 5.747           | 7-F-4     | 6:31PM         | 27                    | 0.12               |                                | 0.48                            | 0.36                            | 0.24                        | 103     | 72             |                 |                    |              |                                         |                              | Corn dormant; crab grass                             |      |
| Aug. 14 | 5         | 1.57            | 12-F-A    | 6:22PM         | 40                    | 0.57               |                                | 1.08                            | 0.64                            | 0.60                        | 103     | 72             |                 |                    |              |                                         |                              | Cotton 26" control strip bare                        |      |





1912-1913

RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS  
Project 368 Escondido Station, Tyler, Texas

| Date       | Weathered |                 | Rainfall            |                       |                    |                                |                                 |                                 | Temperature (degrees F) |         |                  | Humidity         |              |       |                    | Rainfall minus<br>Evaporation<br>(inches) | Soil Loss<br>(tons per acre) | Comments or Weathered          |
|------------|-----------|-----------------|---------------------|-----------------------|--------------------|--------------------------------|---------------------------------|---------------------------------|-------------------------|---------|------------------|------------------|--------------|-------|--------------------|-------------------------------------------|------------------------------|--------------------------------|
|            | Number    | Area<br>(acres) | Days No.<br>(hours) | Duration<br>(minutes) | Amount<br>(inches) | Maximum Evaporation            |                                 |                                 | Maximum                 | Minimum | Began<br>(hours) | Ended<br>(hours) | Maximum Rate |       | Amount<br>(inches) |                                           |                              |                                |
|            |           |                 |                     |                       |                    | 6 minutes<br>(inches per hour) | 18 minutes<br>(inches per hour) | 30 minutes<br>(inches per hour) |                         |         |                  |                  | On ft sec    | Time  |                    |                                           |                              |                                |
| 1939       | (1)       | (2)             | (3)                 | (4)                   | (5)                | (6)                            | (7)                             | (8)                             | (9)                     | (10)    | (11)             | (12)             | (13)         | (14)  | (15)               | (16)                                      | (17)                         | (18)                           |
| Aug. 16    | 3         | 7.936           | 19                  | 8:04PM                | 6                  | 0.04                           |                                 |                                 |                         |         | 70               | NRO              |              |       |                    |                                           |                              | Woods (oaks in full leaf)      |
| Aug. 16    | 4         | 5.747           | 10-F-C              | 8:00PM                | 10                 | 0.13                           |                                 | 0.26                            |                         |         | 70               | NRO              |              |       |                    |                                           |                              | Corn dormant; crab grass       |
| Aug. 16    | 5         | 1.57            | 12-F-A              | 8:00PM                | 10                 | 0.11                           |                                 | 0.22                            |                         |         | 70               | NRO              |              |       |                    |                                           |                              | Cotton 28"; control strip bare |
| Aug. 17    | 3         | 7.936           | 19                  | 9:35PM                | 65                 | 0.45                           |                                 | 0.80                            |                         |         | 72               | NRO              |              |       |                    |                                           |                              | Woods (oaks in full leaf)      |
| Aug. 17-18 | 4         | 5.747           | 10-F-C              | 9:35PM                | 80                 | 0.50                           |                                 | 1.00                            |                         |         | 72               | 9:41PM           | 2:02AM       | 0.098 | 1.11               | 10:40PM                                   | 0.402                        | Corn dormant; crab grass       |
| Aug. 17    | 5         | 1.57            | 12-F-A              | 9:35PM                | 85                 | 0.52                           |                                 | 1.08                            |                         |         | 72               | NRO              |              |       |                    |                                           |                              | Cotton 28"; control strip bare |
| Aug. 23    | 3         | 7.936           | 19                  | 3:53AM                | 110                | 0.26                           |                                 | 0.40                            |                         |         | 65               | NRO              |              |       |                    |                                           |                              | Woods (oaks in full leaf)      |
| Aug. 23    | 3         | 7.936           | 19                  | 7:00AM                | 90                 | 0.08                           |                                 |                                 |                         |         | 65               | NRO              |              |       |                    |                                           |                              | Woods (oaks in full leaf)      |
| Aug. 23    | 4         | 5.747           | 10-F-C              | 3:55AM                | 107                | 0.25                           |                                 | 0.40                            |                         |         | 65               | NRO              |              |       |                    |                                           |                              | Corn dormant; crab grass       |
| Aug. 23    | 4         | 5.747           | 10-F-C              | 6:47AM                | 55                 | 0.06                           |                                 |                                 |                         |         | 65               | NRO              |              |       |                    |                                           |                              | Corn dormant; crab grass       |
| Aug. 23    | 5         | 1.57            | 12-F-A              | 4:30AM                | 73                 | 0.17                           |                                 | 0.24                            |                         |         | 65               | NRO              |              |       |                    |                                           |                              | Cotton 28"; control strip bare |
| Aug. 23    | 5         | 1.57            | 12-F-A              | 6:52AM                | 50                 | 0.08                           |                                 |                                 |                         |         | 65               | NRO              |              |       |                    |                                           |                              | Cotton 28"; control strip bare |
| Aug. 26    | 3         | 7.936           | 19                  | 8:10PM                | 52                 | 0.13                           |                                 | 0.20                            |                         |         | 72               | NRO              |              |       |                    |                                           |                              | Woods (oaks in full leaf)      |
| Aug. 26    | 3         | 7.936           | 19                  | 10:40PM               | 15                 | 0.04                           |                                 |                                 |                         |         | 72               | NRO              |              |       |                    |                                           |                              | Woods (oaks in full leaf)      |
| Aug. 26    | 4         | 5.747           | 10-F-C              |                       |                    | 0.12                           |                                 |                                 |                         |         | 72               | NRO              |              |       |                    |                                           |                              | Corn dormant; crab grass       |
| Aug. 26    | 4         | 5.747           | 10-F-C              |                       |                    | 0.05                           |                                 |                                 |                         |         | 72               | NRO              |              |       |                    |                                           |                              | Corn dormant; crab grass       |
| Aug. 26    | 5         | 1.57            | 12-F-A              | 9:32PM                | 53                 | 0.09                           |                                 |                                 |                         |         | 72               | NRO              |              |       |                    |                                           |                              | Cotton 28"; control strip bare |
| Aug. 26    | 5         | 1.57            | 12-F-A              | 10:40PM               | 52                 | 0.03                           |                                 |                                 |                         |         | 72               | NRO              |              |       |                    |                                           |                              | Cotton 28"; control strip bare |
| Aug. 27    | 3         | 7.936           | 19                  | 12:15AM               | 115                | 0.09                           |                                 |                                 |                         |         | 67               | NRO              |              |       |                    |                                           |                              | Woods (oaks in full leaf)      |
| Aug. 27    | 3         | 7.936           | 19                  | 5:00AM                | 55                 | 0.05                           |                                 |                                 |                         |         | 67               | NRO              |              |       |                    |                                           |                              | Woods (oaks in full leaf)      |
| Aug. 27    | 4         | 5.747           | 10-F-C              |                       |                    | 0.06                           |                                 |                                 |                         |         | 67               | NRO              |              |       |                    |                                           |                              | Corn dormant; crab grass       |
| Aug. 27    | 4         | 5.747           | 10-F-C              |                       |                    | 0.05                           |                                 |                                 |                         |         | 67               | NRO              |              |       |                    |                                           |                              | Corn dormant; crab grass       |
| Aug. 27    | 5         | 1.57            | 12-F-A              | 1:13AM                | 67                 | 0.05                           |                                 |                                 |                         |         | 67               | NRO              |              |       |                    |                                           |                              | Cotton 28"; control strip bare |
| Aug. 27    | 5         | 1.57            | 12-F-A              | 5:00AM                | 165                | 0.08                           |                                 |                                 |                         |         | 67               | NRO              |              |       |                    |                                           |                              | Cotton 28"; control strip bare |
| Sept. 17   | 3         | 7.936           | 19                  | 12:15PM               | 45                 | 0.05                           |                                 |                                 |                         |         | 69               | NRO              |              |       |                    |                                           |                              | Woods (oaks in full leaf)      |
| Sept. 17   | 4         | 5.747           | 10-F-C              | 12:44PM               | 58                 | 0.07                           |                                 |                                 |                         |         | 69               | NRO              |              |       |                    |                                           |                              | Corn dormant; crab grass       |
| Sept. 17   | 5         | 1.57            | 12-F-A              | 1:19PM                | 45                 | 0.11                           |                                 | 0.24                            |                         | 0.12    | 69               | NRO              |              |       |                    |                                           |                              | Cotton 28"; control strip bare |



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH
MONTH Oct. & Nov., 1939SHEET 10 OF 13 SHEETS
 RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS  
 Project 863 Experiment Station, Tyler, Texas

| Date      | Watershed |              | Rainfall |                  |                    |                 |                              |                                | Temperature (degree F) |         | Runoff       |              |              |      | Rainfall Meters (inches) | Base Loss (tons per acre) | Condition of Watershed |      |                                                      |
|-----------|-----------|--------------|----------|------------------|--------------------|-----------------|------------------------------|--------------------------------|------------------------|---------|--------------|--------------|--------------|------|--------------------------|---------------------------|------------------------|------|------------------------------------------------------|
|           | Number    | Area (acres) | Gage No. | Duration (hours) | Duration (minutes) | Amount (inches) | Maximum Intensity            |                                | Maximum                | Minimum | Began (hour) | Ended (hour) | Maximum Rate |      |                          |                           |                        |      |                                                      |
|           |           |              |          |                  |                    |                 | # inches (duration per hour) | 20 minutes (duration per hour) |                        |         |              |              | Cu. ft. sec. | Time |                          |                           |                        |      |                                                      |
| 1939      | (1)       | (2)          | (3)      | (4)              | (5)                | (6)             | (7)                          | (8)                            | (9)                    | (10)    | (11)         | (12)         | (13)         | (14) | (15)                     | (16)                      | (17)                   | (18) | (19)                                                 |
| Oct. 9    | 3         | 7.936        | 19-G-19  | 3:57AM           | 115                | 0.04            |                              |                                |                        |         | 95           | 72           |              |      |                          |                           |                        |      | Woods (oaks in full leaf)                            |
| Oct. 9    | 4         | 5.747        | 10-F-C   |                  |                    | 0.05            |                              |                                |                        |         | 95           | 72           |              |      |                          |                           |                        |      | Corn harvested; stalks disked 7th                    |
| Oct. 9    | 5         | 1.57         | 12-F-A   | 4:01AM           | 120                | 0.07            |                              |                                |                        |         | 95           | 72           |              |      |                          |                           |                        |      | Cotton harvested; stalks disked 4th                  |
| Oct. 9-10 | 3         | 7.936        | 19       | 11:22PM          | 247                | 0.72            | 1.92                         | 0.96                           |                        | 0.80    | 95-87        | 72-60        |              |      |                          |                           |                        |      | Woods (oaks in full leaf)                            |
| Oct. 9-10 | 4         | 5.747        | 10-F-C   | 11:22PM          | 248                | 0.72            | 1.44                         | 1.20                           |                        | 0.76    | 95-87        | 72-60        |              |      |                          |                           |                        |      | Recently disked; bare                                |
| Oct. 9-10 | 5         | 1.57         | 12-F-A   | 11:23PM          | 247                | 0.67            | 1.80                         | 1.04                           |                        | 0.62    | 95-87        | 72-60        |              |      |                          |                           |                        |      | Recently disked; bare                                |
| Oct. 24   | 3         | 7.936        | 19       | 5:35PM           | 20                 | 0.02            |                              |                                |                        |         | 84           | 63           |              |      |                          |                           |                        |      | Woods (oaks in full leaf)                            |
| Oct. 24   | 3         | 7.936        | 19       | 6:59PM           | 226                | 0.04            |                              |                                |                        |         | 84           | 63           |              |      |                          |                           |                        |      | Woods (oaks in full leaf)                            |
| Oct. 24   | 4         | 5.747        | 10-F-C   |                  |                    | 0.02            |                              |                                |                        |         | 84           | 63           |              |      |                          |                           |                        |      | Bare                                                 |
| Oct. 24   | 4         | 5.747        | 10-F-C   |                  |                    | 0.04            |                              |                                |                        |         | 84           | 63           |              |      |                          |                           |                        |      | Bare                                                 |
| Oct. 24   | 5         | 1.57         | 12-F-A   |                  |                    | 0.03            |                              |                                |                        |         | 84           | 63           |              |      |                          |                           |                        |      | Vetch and oats planted in equal strips 14th and 12th |
| Oct. 25   | 3         | 7.936        | 19       | 2:45AM           | 50                 | 0.03            |                              |                                |                        |         | 83           | 68           |              |      |                          |                           |                        |      | Woods (oaks in full leaf)                            |
| Oct. 25   | 3         | 7.936        | 19       | 4:40PM           | 160                | 0.92            | 2.88                         | 1.60                           |                        | 1.00    | 83           | 68           |              |      |                          |                           |                        |      | Woods (oaks in full leaf)                            |
| Oct. 25   | 4         | 5.747        | 10-F-C   | 2:41AM           | 50                 | 0.04            |                              |                                |                        |         | 83           | 68           |              |      |                          |                           |                        |      | Bare                                                 |
| Oct. 25   | 4         | 5.747        | 10-F-C   | 4:27PM           | 163                | 0.91            | 2.88                         | 1.56                           |                        | 1.02    | 83           | 68           |              |      |                          |                           |                        |      | Bare                                                 |
| Oct. 25   | 5         | 1.57         | 12-F-A   | 2:45AM           | 45                 | 0.05            |                              |                                |                        |         | 83           | 68           |              |      |                          |                           |                        |      | Oats 2"; vetch emerging                              |
| Oct. 25   | 5         | 1.57         | 12-F-A   | 4:42PM           | 141                | 0.85            | 1.56                         | 1.16                           |                        | 0.88    | 83           | 68           |              |      |                          |                           |                        |      | Oats 2"; vetch emerging                              |
| Oct. 26   | 3         | 7.936        | 19       |                  |                    | 0.02            |                              |                                |                        |         | 87           | 70           |              |      |                          |                           |                        |      | Woods (oaks in full leaf)                            |
| Oct. 26   | 4         | 5.747        | 10-F-C   |                  |                    | 0.04            |                              |                                |                        |         | 87           | 70           |              |      |                          |                           |                        |      | Recently disked                                      |
| Oct. 27   | 3         | 7.936        | 19       | 11:35AM          | 30                 | 0.25            | 1.20                         | 0.92                           |                        | 0.50    | 85           | 69           |              |      |                          |                           |                        |      | Strip cropped oats; vetch emerging                   |
| Oct. 27   | 4         | 5.747        | 10-F-C   | 11:32AM          | 35                 | 0.23            | 1.44                         | 0.84                           |                        | 0.44    | 85           | 69           |              |      |                          |                           |                        |      |                                                      |
| Oct. 27   | 5         | 1.57         | 12-F-A   | 11:33AM          | 32                 | 0.21            | 1.56                         | 0.76                           |                        | 0.40    | 85           | 69           |              |      |                          |                           |                        |      |                                                      |
| Nov. 10   | 3         | 7.936        | 19       | 2:30AM           | 45                 | 0.04            |                              |                                |                        |         | 70           | 52           |              |      |                          |                           |                        |      | Woods (oaks partially dormant)                       |
| Nov. 10   | 3         | 7.936        | 19       | 5:50AM           | 80                 | 0.13            | 0.48                         | 0.28                           |                        | 0.16    | 70           | 52           |              |      |                          |                           |                        |      | Woods (oaks partially dormant)                       |
| Nov. 10   | 3         | 7.936        | 19       | 8:15AM           | 55                 | 0.02            |                              |                                |                        |         | 70           | 52           |              |      |                          |                           |                        |      | Woods (oaks partially dormant)                       |
| Nov. 10   | 3         | 7.936        | 19       | 10:18AM          | 73                 | 0.04            |                              |                                |                        |         | 70           | 52           |              |      |                          |                           |                        |      | Woods (oaks partially dormant)                       |
| Nov. 10   | 3         | 7.936        | 19       | 1:00PM           | 450                | 0.32            | 0.24                         | 0.16                           |                        | 0.14    | 70           | 52           |              |      |                          |                           |                        |      | Woods (oaks partially dormant)                       |

 Woods (oaks in full leaf)  
 Corn harvested; stalks disked 7th  
 Cotton harvested; stalks disked 4th

 Woods (oaks in full leaf)  
 Recently disked; bare  
 Recently disked; bare

 Woods (oaks in full leaf)  
 Woods (oaks in full leaf)  
 Bare  
 Bare

 Vetch and oats planted in equal  
 strips 14th and 12th

 Woods (oaks in full leaf)  
 Woods (oaks in full leaf)

 Bare  
 Bare

 Oats 2"; vetch emerging  
 Oats 2"; vetch emerging

 Woods (oaks in full leaf)  
 Recently disked

 Woods (oaks in full leaf)  
 Recently disked  
 Strip cropped oats; vetch emerging

 Woods (oaks partially dormant)  
 Woods (oaks partially dormant)  
 Woods (oaks partially dormant)  
 Woods (oaks partially dormant)





UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
DIVISION OF RESEARCH

MONTH Nov., 19 39  
SHEET 11 OF 13 REMARKS

PROJECT SG3 Experiment Station, Tyler, Texas  
RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

| Date       | Watershed |              | Rainfall |               |                    |                 |                             |                              | Temperature (degree F.) |         | Run-off       |                 |              |      | Rainfall minus (inches) | Box Loss (tons per acre) | Condition of Watershed            |      |
|------------|-----------|--------------|----------|---------------|--------------------|-----------------|-----------------------------|------------------------------|-------------------------|---------|---------------|-----------------|--------------|------|-------------------------|--------------------------|-----------------------------------|------|
|            | Number    | Area (acres) | App. No. | Begin (hour)  | Duration (minutes) | Amount (inches) | Maximum Intensity           |                              | Maximum                 | Minimum | Inches (hour) | Amount (inches) | Maximum Rate |      |                         |                          |                                   |      |
|            |           |              |          |               |                    |                 | 5 minutes (inches per hour) | 15 minutes (inches per hour) |                         |         |               |                 | On ft. sec.  | Time |                         |                          |                                   |      |
| 1939       | (1)       | (2)          | (3)      | (4)           | (5)                | (6)             | (7)                         | (8)                          | (9)                     | (10)    | (11)          | (12)            | (13)         | (14) | (15)                    | (16)                     | (17)                              | (18) |
| Nov. 10    | 4         | 5.747        | 10-F-C   | 2142AM        | 30                 | 0.06            |                             |                              |                         |         | 70            | NRO             |              |      |                         |                          | Redikedavetch planted 31 emerg 31 |      |
| Nov. 10    | 4         | 5.747        | 10-F-C   | 5154AM        | 70                 | 0.12            | 0.49                        | 0.32                         | 0.20                    |         | 70            | NRO             |              |      |                         |                          | Redikedavetch planted 31 emerg 31 |      |
| Nov. 10    | 4         | 5.747        | 10-F-C   | 8115AM        | 60                 | 0.02            |                             |                              |                         |         | 70            | NRO             |              |      |                         |                          | Redikedavetch planted 31 emerg 31 |      |
| Nov. 10    | 4         | 5.747        | 10-F-C   | 10115AM       | 70                 | 0.04            |                             |                              |                         |         | 70            | NRO             |              |      |                         |                          | Redikedavetch planted 31 emerg 31 |      |
| Nov. 10    | 4         | 5.747        | 10-F-C   | 11001AM       | 430                | 0.31            | 0.24                        | 0.20                         | 0.16                    |         | 70            | NRO             |              |      |                         |                          | Redikedavetch planted 31 emerg 31 |      |
| Nov. 10    | 5         | 1.57         | 12-F-A   | 2145AM        | 30                 | 0.05            |                             |                              |                         |         | 70            | NRO             |              |      |                         |                          | Oats 23" good; vetch 1" fair      |      |
| Nov. 10    | 5         | 1.57         | 12-F-A   | 5155AM        | 70                 | 0.11            | 0.36                        | 0.24                         | 0.18                    |         | 70            | NRO             |              |      |                         |                          | Oats 23" good; vetch 1" fair      |      |
| Nov. 10    | 5         | 1.57         | 12-F-A   | 8115AM        | 60                 | 0.02            |                             |                              |                         |         | 70            | NRO             |              |      |                         |                          | Oats 23" good; vetch 1" fair      |      |
| Nov. 10    | 5         | 1.57         | 12-F-A   | 10117AM       | 73                 | 0.03            |                             |                              |                         |         | 70            | NRO             |              |      |                         |                          | Oats 23" good; vetch 1" fair      |      |
| Nov. 10    | 5         | 1.57         | 12-F-A   | 1103PM        | 447                | 0.32            | 0.24                        | 0.16                         | 0.12                    |         | 70            | NRO             |              |      |                         |                          | Oats 23" good; vetch 1" fair      |      |
| Nov. 11    | 3         | 7.936        | 19-G-19  | 12151AM       | 115                | 0.09            |                             |                              |                         |         | 56            | NRO             |              |      |                         |                          | Woods (oaks partially dormant)    |      |
| Nov. 11    | 3         | 7.936        | 19-G-19  | 5141AM        | 280                | 0.30            | 0.36                        | 0.24                         | 0.18                    |         | 56            | NRO             |              |      |                         |                          | Woods (oaks partially dormant)    |      |
| Nov. 11    | 3         | 7.936        | 19-G-19  | 121061AM      | 385                | 0.48            | 0.36                        | 0.28                         | 0.26                    |         | 56            | NRO             |              |      |                         |                          | Woods (oaks partially dormant)    |      |
| Nov. 11    | 4         | 5.747        | 10-F-C   | 12152AM       | 65                 | 0.09            |                             |                              |                         |         | 56            | NRO             |              |      |                         |                          | Vetch emerging                    |      |
| Nov. 11    | 4         | 5.747        | 10-F-C   | 5142AM        | 285                | 0.28            | 0.24                        | 0.24                         | 0.16                    |         | 56            | NRO             |              |      |                         |                          | Vetch emerging                    |      |
| Nov. 11    | 4         | 5.747        | 10-F-C   | 121071AM      | 380                | 0.47            | 0.48                        | 0.32                         | 0.28                    |         | 56            | NRO             |              |      |                         |                          | Vetch emerging                    |      |
| Nov. 11    | 5         | 1.57         | 12-F-A   | 12155AM       | 50                 | 0.09            |                             |                              |                         |         | 56            | NRO             |              |      |                         |                          | Oats 23" good; vetch 1" fair      |      |
| Nov. 11    | 5         | 1.57         | 12-F-A   | 6115AM        | 255                | 0.28            | 0.24                        | 0.20                         | 0.16                    |         | 56            | NRO             |              |      |                         |                          | Oats 18" good; vetch 1" fair      |      |
| Nov. 11    | 5         | 1.57         | 12-F-A   | 121071AM      | 383                | 0.46            | 0.48                        | 0.32                         | 0.28                    |         | 56            | NRO             |              |      |                         |                          | Oats 23" good; vetch 1" fair      |      |
| Nov. 11-12 | 3         | 7.936        | 19       | 101001AM      | 235                | 0.16            | 0.24                        | 0.20                         | 0.16                    |         | 56-47         | NRO             |              |      |                         |                          | Woods (oaks partially dormant)    |      |
| Nov. 11-12 | 4         | 5.747        | 10-F-C   | 101121AM      | 225                | 0.16            | 0.24                        | 0.20                         | 0.16                    |         | 56-47         | NRO             |              |      |                         |                          | Vetch emerging                    |      |
| Nov. 11-12 | 5         | 1.57         | 12-F-A   | 101101AM      | 220                | 0.15            | 0.24                        | 0.20                         | 0.14                    |         | 56-47         | NRO             |              |      |                         |                          | Strip cropped; oats 23" vetch 1"  |      |
| Nov. 12    | 3         | 7.936        | 19       | 3111AM        | 245                | 0.05            |                             |                              |                         |         | 47            | NRO             |              |      |                         |                          | Woods (oaks partially dormant)    |      |
| Nov. 12    | 3         | 7.936        | 19       | 10151AM       | 215                | 0.11            | 0.12                        | 0.08                         | 0.08                    |         | 47            | NRO             |              |      |                         |                          | Woods (oaks partially dormant)    |      |
| Nov. 12    | 4         | 5.747        | 10-F-C   | 3122AM        | 215                | 0.03            |                             |                              |                         |         | 47            | NRO             |              |      |                         |                          | Vetch emerging                    |      |
| Nov. 12    | 4         | 5.747        | 10-F-C   | 10157AM       | 195                | 0.09            |                             |                              |                         |         | 47            | NRO             |              |      |                         |                          | Vetch emerging                    |      |
| Nov. 12    | 5         | 1.57         | 12-F-A   | 3100AM        | 255                | 0.06            |                             |                              |                         |         | 47            | NRO             |              |      |                         |                          | Vetch 1" fair; oats 23" good      |      |
| Nov. 12    | 5         | 1.57         | 12-F-A   | Clock stopped |                    | 0.09            |                             |                              |                         |         | 47            | NRO             |              |      |                         |                          | Vetch 1" fair; oats 23" good      |      |
| Nov. 15    | 3         | 7.936        | 19       | 12112AM       | 230                | 0.25            | 0.36                        | 0.20                         | 0.20                    |         | 60            | NRO             |              |      |                         |                          | Woods (oaks dormant)              |      |
| Nov. 15    | 3         | 7.936        | 19       | 6125AM        | 260                | 0.75            | 0.96                        | 0.44                         | 0.42                    |         | 60            | NRO             |              |      |                         |                          | Woods (oaks dormant)              |      |

Reddedavetch planted 31 emerging  
Reddedavetch planted 31 emerging  
Reddedavetch planted 31 emerging  
Reddedavetch planted 31 emerging  
Reddedavetch planted 31 emerging  
Oats 2 1/2" good; vetch 1" fair  
Oats 2 1/2" good; vetch 1" fair  
Oats 2 1/2" good; vetch 1" fair  
Oats 2 1/2" good; vetch 1" fair  
Oats 2 1/2" good; vetch 1" fair

Woods (oaks partially dormant)  
Woods (oaks partially dormant)  
Woods (oaks partially dormant)  
Vetch emerging  
Vetch emerging  
Oats 2 1/2" good; vetch 1" fair  
Oats 2 1/2" good; vetch 1" fair  
Oats 2 1/2" good; vetch 1" fair

Woods (oaks partially dormant)  
Vetch emerging  
Strip cropped; oats 2 1/2" vetch 1"

Woods (oaks partially dormant)  
Woods (oaks partially dormant)  
Vetch emerging  
Vetch emerging  
Vetch 1" fair; oats 2 1/2" good  
Vetch 1" fair; oats 2 1/2" good

Woods (oaks dormant)  
Woods (oaks dormant)



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 DIVISION OF RESEARCH

Project R-3 Experiment Station, Taylor, Texas

## RECORD OF SINGLE STORMS AND THEIR RUN-OFFS ON VARIOUS WATERSHEDS

 MONTH Nov. & Dec., 19 39  
 SHEET 12 OF 13 PAGES

| DATE       | WATERSHED | Number | Area (acres) | Stage Sta. | Mean (feet) | Duration (minutes) | Amount (inches) | MAXIMUM INTENSITY          |                              |                              | TERRAIN (Slope per ft.) |         | Height (feet) | R. (in) | Amount (inches) | MAXIMUM RATE |       | HAIRFALL MEAS. (inches) | RPT. TIME (hours per inch) | OBSERVATION OF WATERSHED                                                                  |
|------------|-----------|--------|--------------|------------|-------------|--------------------|-----------------|----------------------------|------------------------------|------------------------------|-------------------------|---------|---------------|---------|-----------------|--------------|-------|-------------------------|----------------------------|-------------------------------------------------------------------------------------------|
|            |           |        |              |            |             |                    |                 | 1 minute (inches per hour) | 15 minutes (inches per hour) | 30 minutes (inches per hour) | Maximum                 | Minimum |               |         |                 | 1st          | 2nd   |                         |                            |                                                                                           |
| 1939       | (1)       | (2)    | (3)          | (4)        | (5)         | (6)                | (7)             | (8)                        | (9)                          | (10)                         | (11)                    | (12)    | (13)          | (14)    | (15)            | (16)         | (17)  | (18)                    | (19)                       | (20)                                                                                      |
| Nov. 16    | 3         | 7.936  | 19-C-19      | 3132AM     | 50          | 0.03               | 0.03            |                            |                              |                              | 61                      | 50      | NRO           |         |                 |              |       |                         |                            | Woods (oaks, dormant)<br>Woods (oaks, dormant)<br>Woods (oaks, dormant)                   |
| Nov. 16    | 3         | 7.936  | 19-C-19      | 7101AM     | 120         | 0.04               | 0.04            |                            |                              |                              | 61                      | 50      | NRO           |         |                 |              |       |                         |                            | Woods (oaks, dormant)<br>Woods (oaks, dormant)<br>Woods (oaks, dormant)                   |
| Nov. 16    | 3         | 7.936  | 19-C-19      | 1046AM     | 165         | 0.03               | 0.03            |                            |                              |                              | 61                      | 50      | NRO           |         |                 |              |       |                         |                            | Woods (oaks, dormant)<br>Woods (oaks, dormant)<br>Woods (oaks, dormant)                   |
| Nov. 15    | 4         | 5.747  | 7-P-4        | 1213AM     | 645         | 1.02               | 0.09            | 0.96                       | 0.44                         | 0.42                         | 60                      | 48      | NRO           |         |                 |              |       |                         |                            | Vetch good stand 2" high<br>Vetch good stand 2" high                                      |
| Nov. 16    | 4         | 5.747  | 7-P-4        | 3130AM     | 445         | 0.09               |                 |                            |                              |                              | 61                      | 50      | NRO           |         |                 |              |       |                         |                            | Vetch good stand 2" high<br>Vetch good stand 2" high                                      |
| Nov. 15    | 5         | 1.57   | 12-F-4       | 1213AM     | 205         | 0.24               | 0.72            | 0.72                       | 0.28                         | 0.22                         | 60                      | 48      | NRO           |         |                 |              |       |                         |                            | Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good                                |
| Nov. 15    | 5         | 1.57   | 12-F-4       | 6130AM     | 255         | 0.72               | 0.60            | 0.60                       | 0.44                         | 0.40                         | 60                      | 48      | NRO           |         |                 |              |       |                         |                            | Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good                                |
| Nov. 16    | 5         | 1.57   | 12-F-4       | 7130AM     | 35          | 0.03               | 0.03            |                            |                              |                              | 61                      | 50      | NRO           |         |                 |              |       |                         |                            | Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good                                |
| Nov. 16    | 5         | 1.57   | 12-F-4       | 11100AM    | 15          | 0.01               | 0.01            |                            |                              |                              | 61                      | 50      | NRO           |         |                 |              |       |                         |                            | Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good                                |
| Nov. 16    | 3         | 7.936  | 19           |            |             | 0.02               | 0.01            |                            |                              |                              | 61                      | 50      | NRO           |         |                 |              |       |                         |                            | Woods (oaks dormant)<br>Woods (oaks dormant)<br>Woods (oaks dormant)                      |
| Nov. 17    | 3         | 7.936  | 19           |            |             | 0.01               | 0.01            |                            |                              |                              | 64                      | 55      | NRO           |         |                 |              |       |                         |                            | Woods (oaks dormant)<br>Woods (oaks dormant)<br>Woods (oaks dormant)                      |
| Nov. 18    | 3         | 7.936  | 19           |            |             | 0.63               | 0.96            | 0.68                       | 0.46                         | 0.46                         | 63                      | 56      | NRO           |         |                 |              |       |                         |                            | Vetch good stand 2" high<br>Vetch good stand 2" high<br>Vetch good stand 2" high          |
| Nov. 16    | 4         | 5.747  | 10-F-C       |            |             | 0.02               | 0.03            |                            |                              |                              | 61                      | 50      |               |         |                 |              |       |                         |                            | Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good |
| Nov. 17    | 4         | 5.747  | 10-F-C       |            |             | 0.03               | 0.03            |                            |                              |                              | 64                      | 55      |               |         |                 |              |       |                         |                            | Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good |
| Nov. 17-B  | 4         | 5.747  | 10-F-C       | 11140AM    | 300         | 0.60               | 0.84            | 0.60                       | 0.46                         | 0.46                         | 63                      | 56      | 4105AM 5100AM | 0.003   | 0.04            | 4112AM       | 0.647 | 0.000                   |                            | Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good |
| Nov. 16    | 5         | 1.57   | 12-F-4       |            |             | 0.01               | 0.01            |                            |                              |                              | 61                      | 50      |               |         |                 |              |       |                         |                            | Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good |
| Nov. 17    | 5         | 1.57   | 12-F-4       |            |             | 0.02               | 0.02            |                            |                              |                              | 64                      | 55      |               |         |                 |              |       |                         |                            | Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good |
| Nov. 18    | 5         | 1.57   | 12-F-4       | 12122AM    | 320         | 0.59               | 1.44            | 0.72                       | 0.48                         | 0.48                         | 63                      | 56      | Silt box      | 0.017   | No file         |              | 0.603 | 0.000                   |                            | Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good |
| Nov. 29-30 | 3         | 7.936  | 19           | 4155AM     | 960         | 0.82               | 0.64            | 0.12                       | 0.10                         | 0.10                         | 54-52                   | 41-42   | NRO           |         |                 |              |       |                         |                            | Woods (oaks dormant)<br>Woods (oaks dormant)<br>Woods (oaks dormant)                      |
| Nov. 30    | 3         | 7.936  | 19           | 10120AM    | 280         | 0.34               | 0.48            | 0.32                       | 0.22                         | 0.22                         | 52                      | 42      | NRO           |         |                 |              |       |                         |                            | Vetch good stand 2" high<br>Vetch good stand 2" high<br>Vetch good stand 2" high          |
| Nov. 29    | 4         | 5.747  | 10-F-C       | 6100AM     | 245         | 0.10               | 0.12            | 0.08                       | 0.06                         | 0.06                         | 54                      | 41      | NRO           |         |                 |              |       |                         |                            | Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good |
| Nov. 29-30 | 4         | 5.747  | 10-F-C       | 11105AM    | 955         | 1.10               | 0.60            | 0.40                       | 0.24                         | 0.24                         | 52                      | 42      | NRO           |         |                 |              |       |                         |                            | Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good |
| Nov. 30    | 5         | 1.57   | 12-F-4       | 5105AM     | 970         | 0.78               | 0.12            | 0.08                       | 0.08                         | 0.08                         | 54-52                   | 41-42   | NRO           |         |                 |              |       |                         |                            | Silt crop, adjoins 2" vetch 2" strip crop, adjoins 2" vetch 2"                            |
| Nov. 30    | 5         | 1.57   | 12-F-4       | 10120AM    | 277         | 0.37               | 0.48            | 0.32                       | 0.26                         | 0.26                         | 52                      | 42      | NRO           |         |                 |              |       |                         |                            | Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good<br>Vetch 2" good; oats 2" good |
| Dec. 15    | 3         | 7.936  | 19           |            |             | 0.02               | 0.02            |                            |                              |                              | 64                      | 44      | NRO           |         |                 |              |       |                         |                            | Woods (oaks dormant)<br>Vetch, good stand, 2" high<br>Oats 2" good; vetch 2" good         |
| Dec. 15    | 4         | 5.747  | 10-F-C       |            |             | 0.02               | 0.02            |                            |                              |                              | 64                      | 44      | NRO           |         |                 |              |       |                         |                            | Woods (oaks dormant)<br>Vetch, good stand, 2" high<br>Oats 2" good; vetch 2" good         |
| Dec. 15    | 5         | 1.57   | 12-F-4       |            |             | 0.02               | 0.02            |                            |                              |                              | 64                      | 44      | NRO           |         |                 |              |       |                         |                            | Woods (oaks dormant)<br>Vetch, good stand, 2" high<br>Oats 2" good; vetch 2" good         |
| Dec. 22    | 3         | 7.936  | 19           | 4122AM     | 973         | 2.24               | 0.96            | 0.68                       | 0.56                         | 0.56                         | 62                      | 51      | NRO           |         |                 |              |       |                         |                            | Woods (oaks dormant)<br>Woods (oaks dormant)<br>Woods (oaks dormant)                      |
| Dec. 23    | 3         | 7.936  | 19           |            |             | 2.02               | 0.96            | 0.68                       | 0.56                         | 0.56                         | 64                      | 46      | NRO           |         |                 |              |       |                         |                            | Woods (oaks dormant)<br>Woods (oaks dormant)<br>Woods (oaks dormant)                      |





# RICORDO DI SINGLE STORMS AND THEIR RUN-UPS ON VARIOUS WATERSHEDS

SHEET 13 OF 13 PLATES

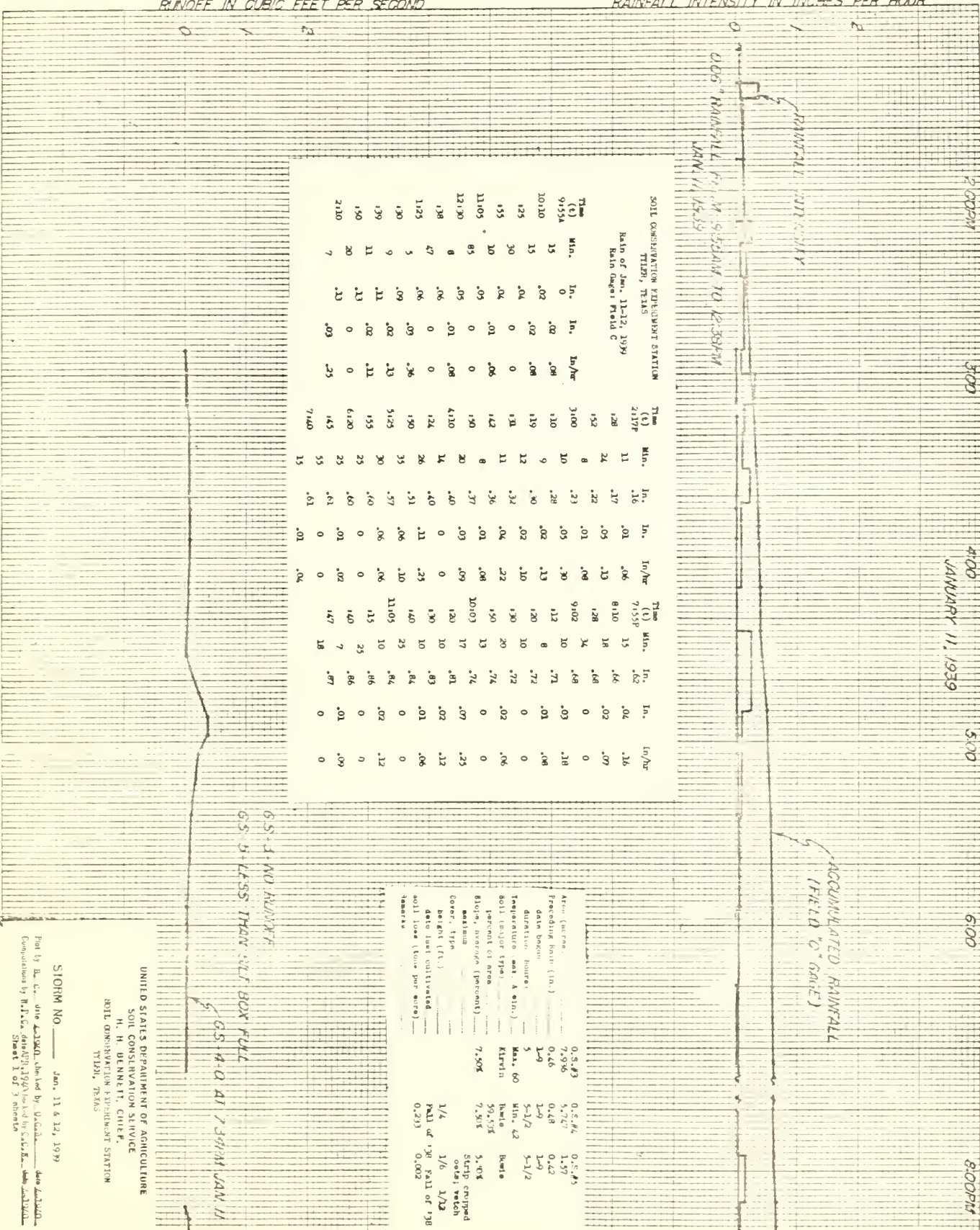
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ACCUMULATED RAINFALL & RUNOFF IN INCHES  
RAINFALL INTENSITY IN INCHES PER HOUR

RUNOFF IN CUBIC FEET PER SECOND



SOIL CONSERVATION EXPERIMENT STATION

TILLER, TEXAS

Rain of Jan. 11-12, 1939

Rain Gauge Field C

| Time (t) | Min. | In. | In. | In/hr | Time (t) | Min. | In. | In. | In/hr |
|----------|------|-----|-----|-------|----------|------|-----|-----|-------|
| 9:55A    | 15   | .02 | .08 | .08   | 2:17P    | 11   | .16 | .01 | .06   |
| 10:10    | 15   | .02 | .08 | .08   | 2:28     | 24   | .27 | .05 | .13   |
| 125      | 30   | .04 | 0   | 0     | 2:52     | 8    | .23 | .01 | .08   |
| 155      | 30   | .04 | 0   | 0     | 3:00     | 10   | .28 | .05 | .30   |
| 11:05    | 85   | .09 | 0   | 0     | 3:10     | 9    | .28 | .02 | .13   |
| 12:30    | 8    | .05 | .01 | .08   | 3:19     | 12   | .40 | .02 | .10   |
| 138      | 47   | .06 | 0   | 0     | 3:24     | 11   | .36 | .04 | .22   |
| 130      | 5    | .09 | .36 | .36   | 3:28     | 8    | .37 | .01 | .08   |
| 139      | 9    | .11 | .33 | .33   | 3:30     | 11   | .36 | .04 | .22   |
| 150      | 11   | .13 | .21 | .21   | 3:42     | 8    | .37 | .01 | .08   |
| 210      | 20   | .23 | 0   | 0     | 3:50     | 20   | .40 | .03 | .09   |
|          | 7    | .03 | .23 | .23   | 4:10     | 14   | .40 | 0   | 0     |
|          |      |     |     |       | 4:24     | 26   | .40 | .11 | .23   |
|          |      |     |     |       | 4:30     | 35   | .51 | .06 | .10   |
|          |      |     |     |       | 4:35     | 30   | .57 | .06 | .10   |
|          |      |     |     |       | 4:40     | 25   | .60 | .06 | .12   |
|          |      |     |     |       | 4:45     | 25   | .60 | .01 | .09   |
|          |      |     |     |       | 4:55     | 55   | .61 | 0   | 0     |
|          |      |     |     |       | 5:00     | 15   | .61 | .01 | .06   |

ACCUMULATED RAINFALL  
(FIELD "C" GAGE)

6.5-4 NO RUNOFF  
6.5-4 LESS THAN SET BOX FULL  
6.5-4-0 AT 7:30 PM JAN 11

|                             |         |         |       |
|-----------------------------|---------|---------|-------|
| Area (acres)                | 0.543   | 0.544   | 0.545 |
| Preceding hour (in.)        | 7.996   | 5.727   | 1.57  |
| Date begun                  | 1-9     | 1-9     | 1-9   |
| Duration (hours)            | 3       | 5-1/2   | 5-1/2 |
| Temperature max & min (in.) | Max. 60 | Min. 42 |       |
| Soil (color type)           | Black   | Black   | Black |
| Percent of area             | 7.5%    | 7.5%    | 7.5%  |
| Moisture (percent)          | 7.5%    | 7.5%    | 7.5%  |
| Cover, type                 |         |         |       |
| Height (ft.)                |         |         |       |
| Depth last cultivated       | 1/4     | 1/6     | 1/12  |
| Soil loss (tons per acre)   | 0.213   | 0.002   |       |
| Remarks                     |         |         |       |

UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

H. H. BENNETT, CHIEF

SOIL CONSERVATION EXPERIMENT STATION

TILLER, TEXAS

STORM NO. Jan. 11 & 12, 1939

Plot by B. C. ...  
Computations by H. H. Bennett, Chief  
Sheet 1 of 3 sheets



ACCUMULATED RAINFALL & RUNOFF IN INCHES  
RAINFALL INTENSITY IN INCHES PER HOUR

RUNOFF IN CUBIC FEET PER SECOND

JANUARY 12, 1939

10:00

11:00

12:00

JANUARY 12, 1939

1:00

2:00

RAINFALL INTENSITY

ACCUMULATED RAINFALL  
(FIELD GAGE)

| SOIL CONSERVATION EXPERIMENT STATION |      |      |     |       |          |      |      |     |       |
|--------------------------------------|------|------|-----|-------|----------|------|------|-----|-------|
| TULSA, TEXAS                         |      |      |     |       |          |      |      |     |       |
| Rain of Jan. 12, 1939                |      |      |     |       |          |      |      |     |       |
| Rain Gage No. 10 C                   |      |      |     |       |          |      |      |     |       |
| Time (h)                             | Min. | In.  | In. | In/hr | Time (h) | Min. | In.  | In. | In/hr |
| 12:03.4                              | 55   | .87  | .04 | .04   | 4:55     | 15   | 1.24 | .02 | .08   |
| 1:00                                 | 38   | .91  | 0   | 0     | 5:15     | 25   | 1.25 | .01 | .02   |
| 1:40                                 | 12   | .94  | .03 | .15   | 5:15     | 25   | 1.26 | .01 | .02   |
| 1:55                                 | 5    | .96  | .02 | .24   | 5:15     | 25   | 1.27 | .01 | .02   |
| 2:10                                 | 15   | 1.05 | .09 | .36   | 5:15     | 25   | 1.28 | .01 | .02   |
| 2:20                                 | 10   | 1.10 | .05 | .30   | 5:15     | 25   | 1.29 | .01 | .02   |
| 2:30                                 | 15   | 1.14 | .04 | .36   | 5:15     | 25   | 1.30 | .01 | .02   |
| 2:40                                 | 15   | 1.16 | .02 | .30   | 5:15     | 25   | 1.31 | .01 | .02   |
| 2:50                                 | 15   | 1.19 | .09 | .36   | 5:15     | 25   | 1.32 | .01 | .02   |
| 3:00                                 | 12   | 1.21 | .15 | .45   | 5:15     | 25   | 1.33 | .01 | .02   |
| 3:10                                 | 12   | 1.22 | .15 | .45   | 5:15     | 25   | 1.34 | .01 | .02   |
| 3:20                                 | 12   | 1.23 | .15 | .45   | 5:15     | 25   | 1.35 | .01 | .02   |
| 3:30                                 | 12   | 1.24 | .15 | .45   | 5:15     | 25   | 1.36 | .01 | .02   |
| 3:40                                 | 12   | 1.25 | .15 | .45   | 5:15     | 25   | 1.37 | .01 | .02   |
| 3:50                                 | 12   | 1.26 | .15 | .45   | 5:15     | 25   | 1.38 | .01 | .02   |
| 4:00                                 | 12   | 1.27 | .15 | .45   | 5:15     | 25   | 1.39 | .01 | .02   |
| 4:10                                 | 12   | 1.28 | .15 | .45   | 5:15     | 25   | 1.40 | .01 | .02   |
| 4:20                                 | 12   | 1.29 | .15 | .45   | 5:15     | 25   | 1.41 | .01 | .02   |
| 4:30                                 | 12   | 1.30 | .15 | .45   | 5:15     | 25   | 1.42 | .01 | .02   |
| 4:40                                 | 12   | 1.31 | .15 | .45   | 5:15     | 25   | 1.43 | .01 | .02   |
| 4:50                                 | 12   | 1.32 | .15 | .45   | 5:15     | 25   | 1.44 | .01 | .02   |
| 5:00                                 | 12   | 1.33 | .15 | .45   | 5:15     | 25   | 1.45 | .01 | .02   |
| 5:10                                 | 12   | 1.34 | .15 | .45   | 5:15     | 25   | 1.46 | .01 | .02   |
| 5:20                                 | 12   | 1.35 | .15 | .45   | 5:15     | 25   | 1.47 | .01 | .02   |
| 5:30                                 | 12   | 1.36 | .15 | .45   | 5:15     | 25   | 1.48 | .01 | .02   |
| 5:40                                 | 12   | 1.37 | .15 | .45   | 5:15     | 25   | 1.49 | .01 | .02   |
| 5:50                                 | 12   | 1.38 | .15 | .45   | 5:15     | 25   | 1.50 | .01 | .02   |
| 6:00                                 | 12   | 1.39 | .15 | .45   | 5:15     | 25   | 1.51 | .01 | .02   |
| 6:10                                 | 12   | 1.40 | .15 | .45   | 5:15     | 25   | 1.52 | .01 | .02   |
| 6:20                                 | 12   | 1.41 | .15 | .45   | 5:15     | 25   | 1.53 | .01 | .02   |
| 6:30                                 | 12   | 1.42 | .15 | .45   | 5:15     | 25   | 1.54 | .01 | .02   |
| 6:40                                 | 12   | 1.43 | .15 | .45   | 5:15     | 25   | 1.55 | .01 | .02   |
| 6:50                                 | 12   | 1.44 | .15 | .45   | 5:15     | 25   | 1.56 | .01 | .02   |
| 7:00                                 | 12   | 1.45 | .15 | .45   | 5:15     | 25   | 1.57 | .01 | .02   |
| 7:10                                 | 12   | 1.46 | .15 | .45   | 5:15     | 25   | 1.58 | .01 | .02   |
| 7:20                                 | 12   | 1.47 | .15 | .45   | 5:15     | 25   | 1.59 | .01 | .02   |
| 7:30                                 | 12   | 1.48 | .15 | .45   | 5:15     | 25   | 1.60 | .01 | .02   |
| 7:40                                 | 12   | 1.49 | .15 | .45   | 5:15     | 25   | 1.61 | .01 | .02   |
| 7:50                                 | 12   | 1.50 | .15 | .45   | 5:15     | 25   | 1.62 | .01 | .02   |
| 8:00                                 | 12   | 1.51 | .15 | .45   | 5:15     | 25   | 1.63 | .01 | .02   |
| 8:10                                 | 12   | 1.52 | .15 | .45   | 5:15     | 25   | 1.64 | .01 | .02   |
| 8:20                                 | 12   | 1.53 | .15 | .45   | 5:15     | 25   | 1.65 | .01 | .02   |
| 8:30                                 | 12   | 1.54 | .15 | .45   | 5:15     | 25   | 1.66 | .01 | .02   |
| 8:40                                 | 12   | 1.55 | .15 | .45   | 5:15     | 25   | 1.67 | .01 | .02   |
| 8:50                                 | 12   | 1.56 | .15 | .45   | 5:15     | 25   | 1.68 | .01 | .02   |
| 9:00                                 | 12   | 1.57 | .15 | .45   | 5:15     | 25   | 1.69 | .01 | .02   |
| 9:10                                 | 12   | 1.58 | .15 | .45   | 5:15     | 25   | 1.70 | .01 | .02   |
| 9:20                                 | 12   | 1.59 | .15 | .45   | 5:15     | 25   | 1.71 | .01 | .02   |
| 9:30                                 | 12   | 1.60 | .15 | .45   | 5:15     | 25   | 1.72 | .01 | .02   |
| 9:40                                 | 12   | 1.61 | .15 | .45   | 5:15     | 25   | 1.73 | .01 | .02   |
| 9:50                                 | 12   | 1.62 | .15 | .45   | 5:15     | 25   | 1.74 | .01 | .02   |
| 10:00                                | 12   | 1.63 | .15 | .45   | 5:15     | 25   | 1.75 | .01 | .02   |
| 10:10                                | 12   | 1.64 | .15 | .45   | 5:15     | 25   | 1.76 | .01 | .02   |
| 10:20                                | 12   | 1.65 | .15 | .45   | 5:15     | 25   | 1.77 | .01 | .02   |
| 10:30                                | 12   | 1.66 | .15 | .45   | 5:15     | 25   | 1.78 | .01 | .02   |
| 10:40                                | 12   | 1.67 | .15 | .45   | 5:15     | 25   | 1.79 | .01 | .02   |
| 10:50                                | 12   | 1.68 | .15 | .45   | 5:15     | 25   | 1.80 | .01 | .02   |
| 11:00                                | 12   | 1.69 | .15 | .45   | 5:15     | 25   | 1.81 | .01 | .02   |
| 11:10                                | 12   | 1.70 | .15 | .45   | 5:15     | 25   | 1.82 | .01 | .02   |
| 11:20                                | 12   | 1.71 | .15 | .45   | 5:15     | 25   | 1.83 | .01 | .02   |
| 11:30                                | 12   | 1.72 | .15 | .45   | 5:15     | 25   | 1.84 | .01 | .02   |
| 11:40                                | 12   | 1.73 | .15 | .45   | 5:15     | 25   | 1.85 | .01 | .02   |
| 11:50                                | 12   | 1.74 | .15 | .45   | 5:15     | 25   | 1.86 | .01 | .02   |
| 12:00                                | 12   | 1.75 | .15 | .45   | 5:15     | 25   | 1.87 | .01 | .02   |

6.5-4  
10.6-0.00  
10.6-0.00  
10.6-0.00  
10.6-0.00  
10.6-0.00

UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

SOIL CONSERVATION EXPERIMENT STATION

TULSA, TEXAS

Plot by H.C. - date 4-20 - checked by O.C. - date 4-20  
Computation by H.C. - date 4-20 - checked by O.C. - date 4-20

Sheet 2 of 2 pages

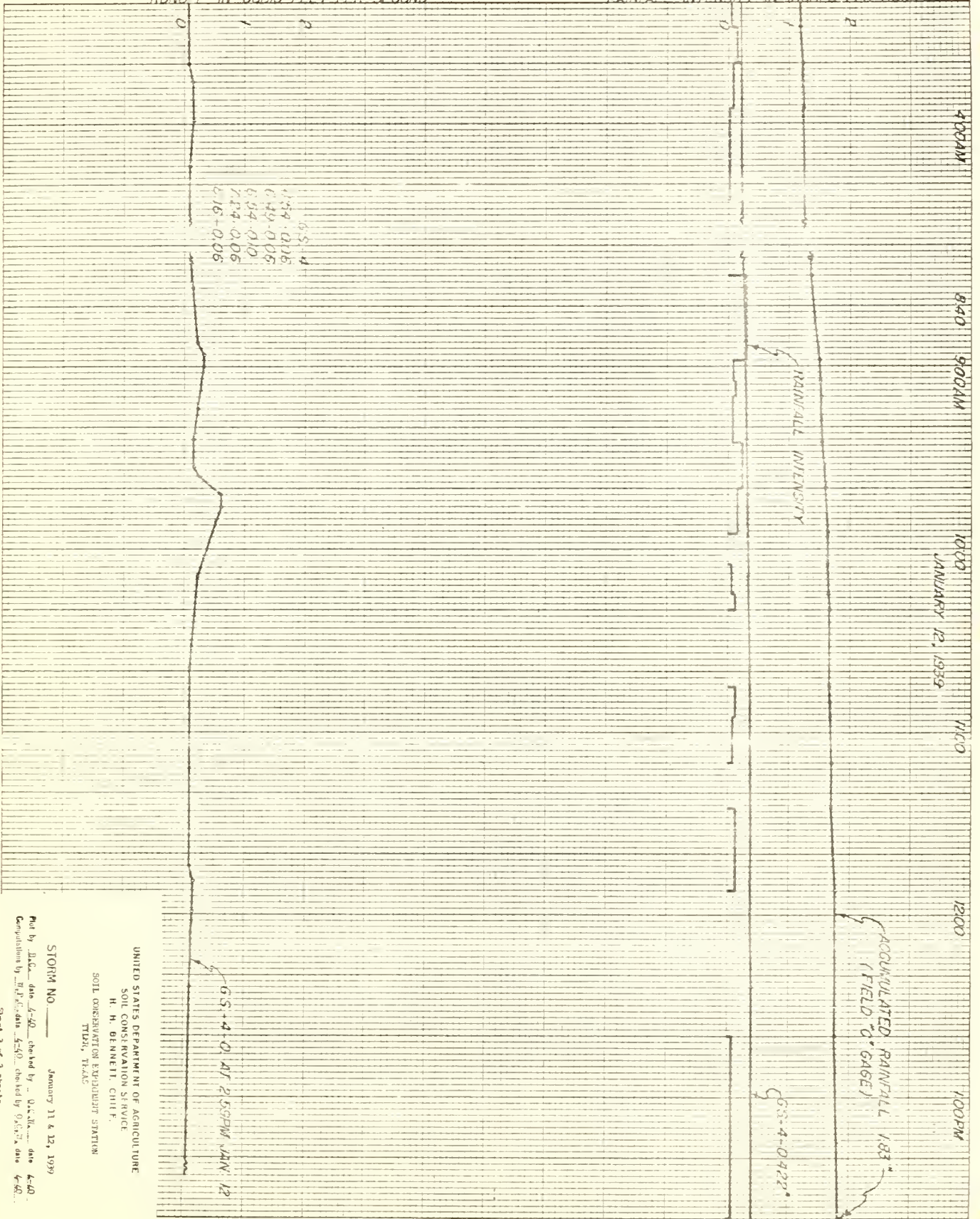


1850



ACCUMULATED RAINFALL & RUNOFF IN INCHES  
 RAINFALL INTENSITY IN INCHES PER HOUR

RUNOFF IN CUBIC FEET PER SECOND



UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

H. H. BENNETT, CHIEF

SOIL CONSERVATION EXPERIMENT STATION

WDA, TULSA

STORM NO. — January 11 & 12, 1939

Plot by J.D.C. data 4-40 checked by — J.D.C. data 4-40  
 Computations by W.P. G. data 4-40 checked by J.D.C. data 4-40

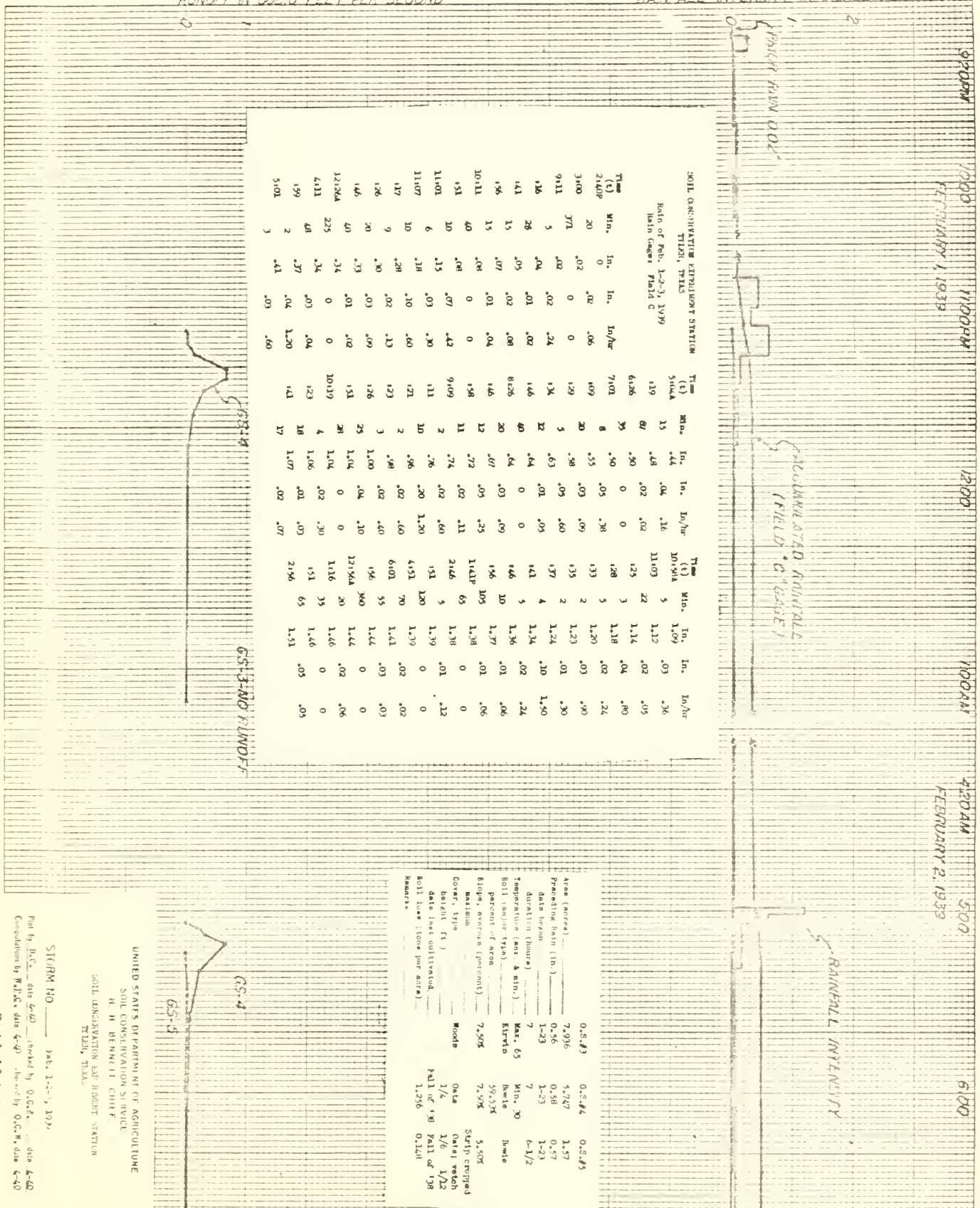
Sheet 3 of 3 sheets



# ACCUMULATED RAINFALL & RUNOFF IN INCHES

RUNOFF IN CUBIC FEET PER SECOND

RAINFALL INTENSITY IN INCHES PER HOUR



UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 H. H. BENNETT, CHIEF  
 SOIL CONSERVATION EXP. REPORT STATION  
 TULSA, TEXAS

STORM NO. 120-1-2-3-107  
 Plot by B.C. date 4-40 checked by G.C.F. date 4-40  
 Computation by M.L.A. date 4-40 checked by G.C.F. date 4-40

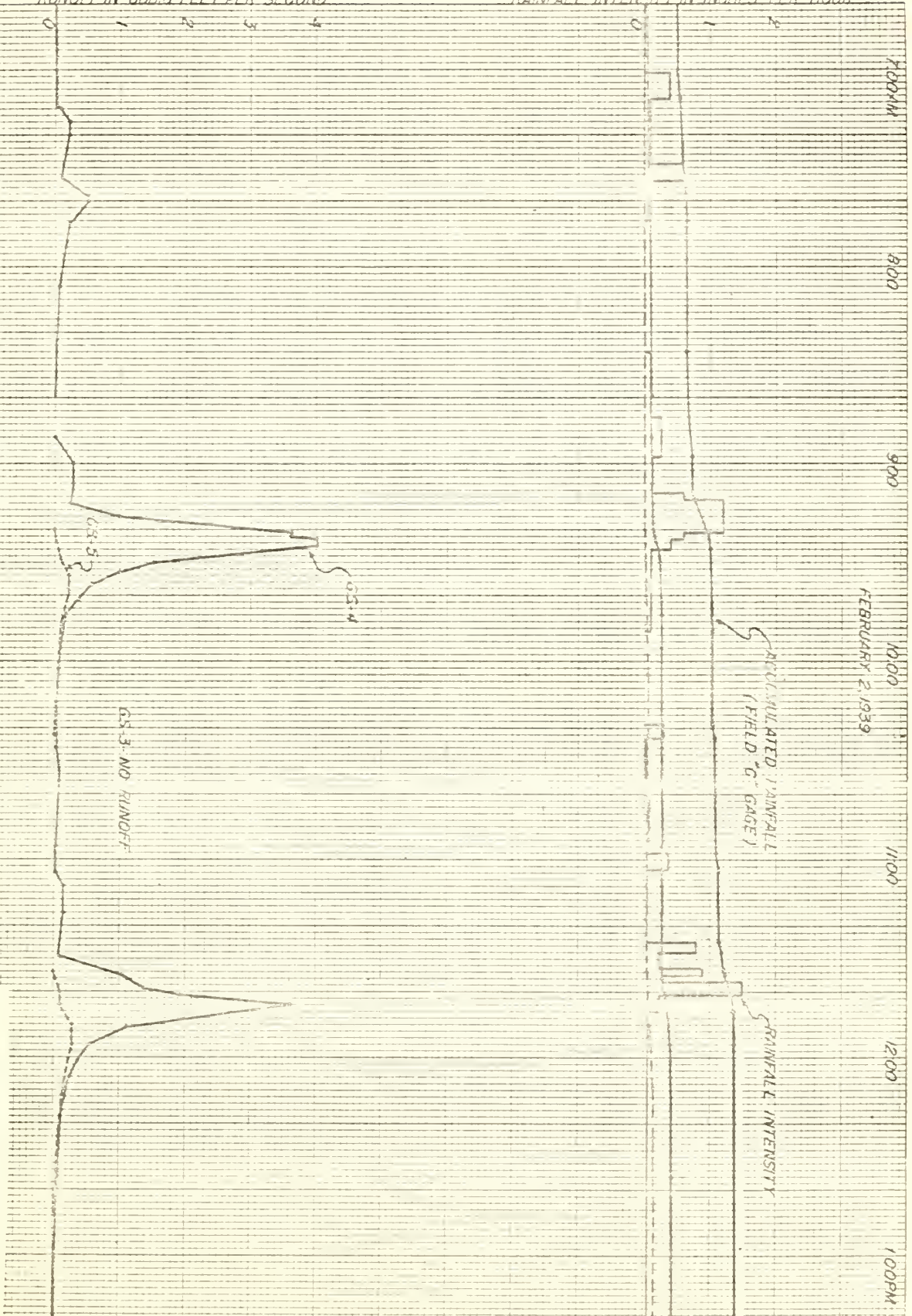
Sheet 1 of 3 sheets





ACCUMULATED RAINFALL & RUNOFF IN INCHES  
RAINFALL INTENSITY IN INCHES PER HOUR

RUNOFF IN CUBIC FEET PER SECOND



UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

H. H. BENNETT, CHIEF

OIL CORRELATION &amp; ADJ. UNIT STATION

 $\gamma_1 \wedge \gamma_2, \gamma_3 \wedge \gamma_4$ 

ON WIM NO. \_\_\_\_\_

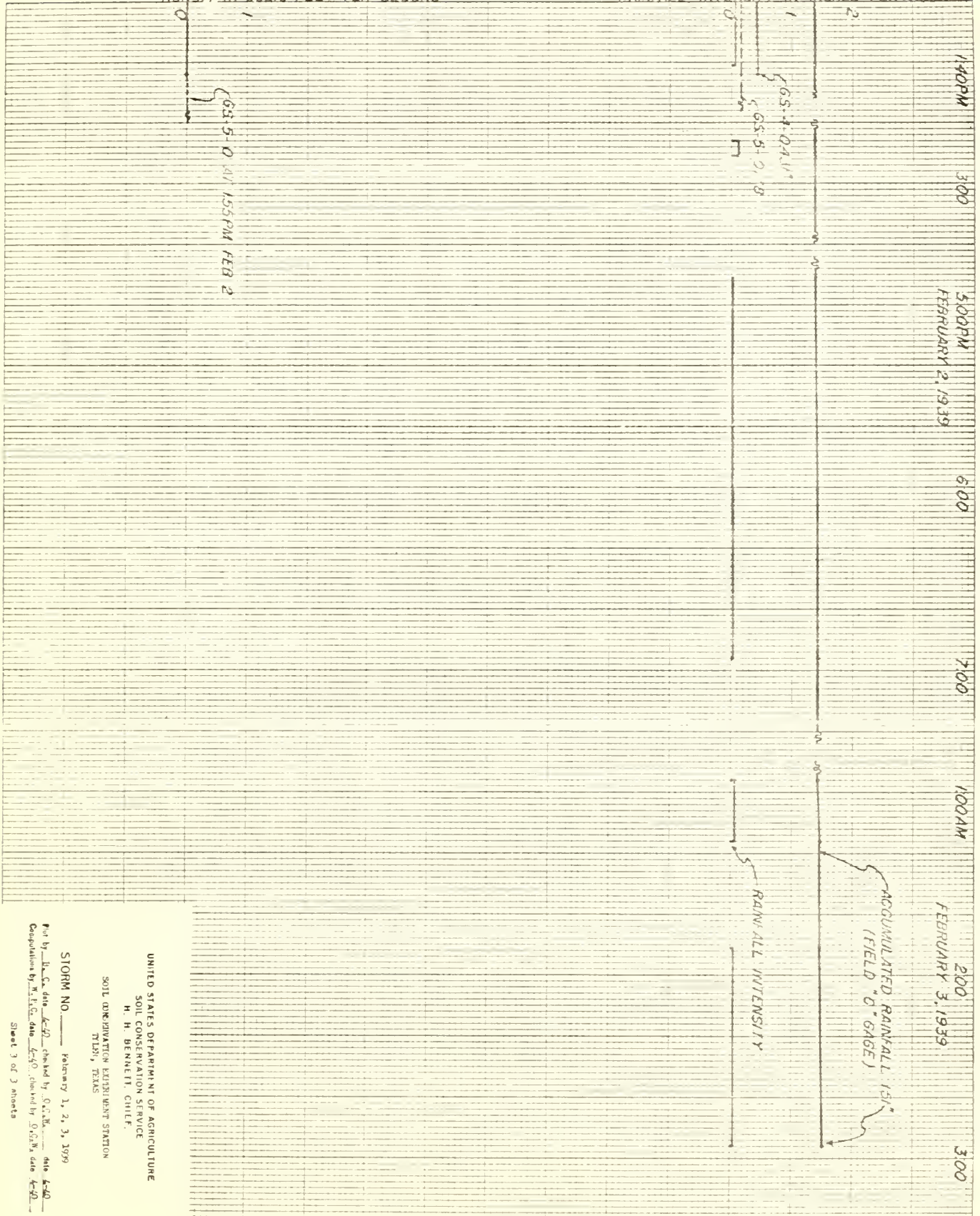
Computations by Ylvisio date 6-70; packets 1, 2; disto A-GJ





ACCUMULATED RAINFALL & RUNOFF IN INCHES  
 RAINFALL INTENSITY IN INCHES PER HOUR

RUNOFF IN CUBIC FEET PER SECOND



UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

H. H. BENNETT, CHIEF

SOIL CONSERVATION EXPERIMENT STATION

MIAMI, FLA.

STORM NO. 1, 2, 3, 1939

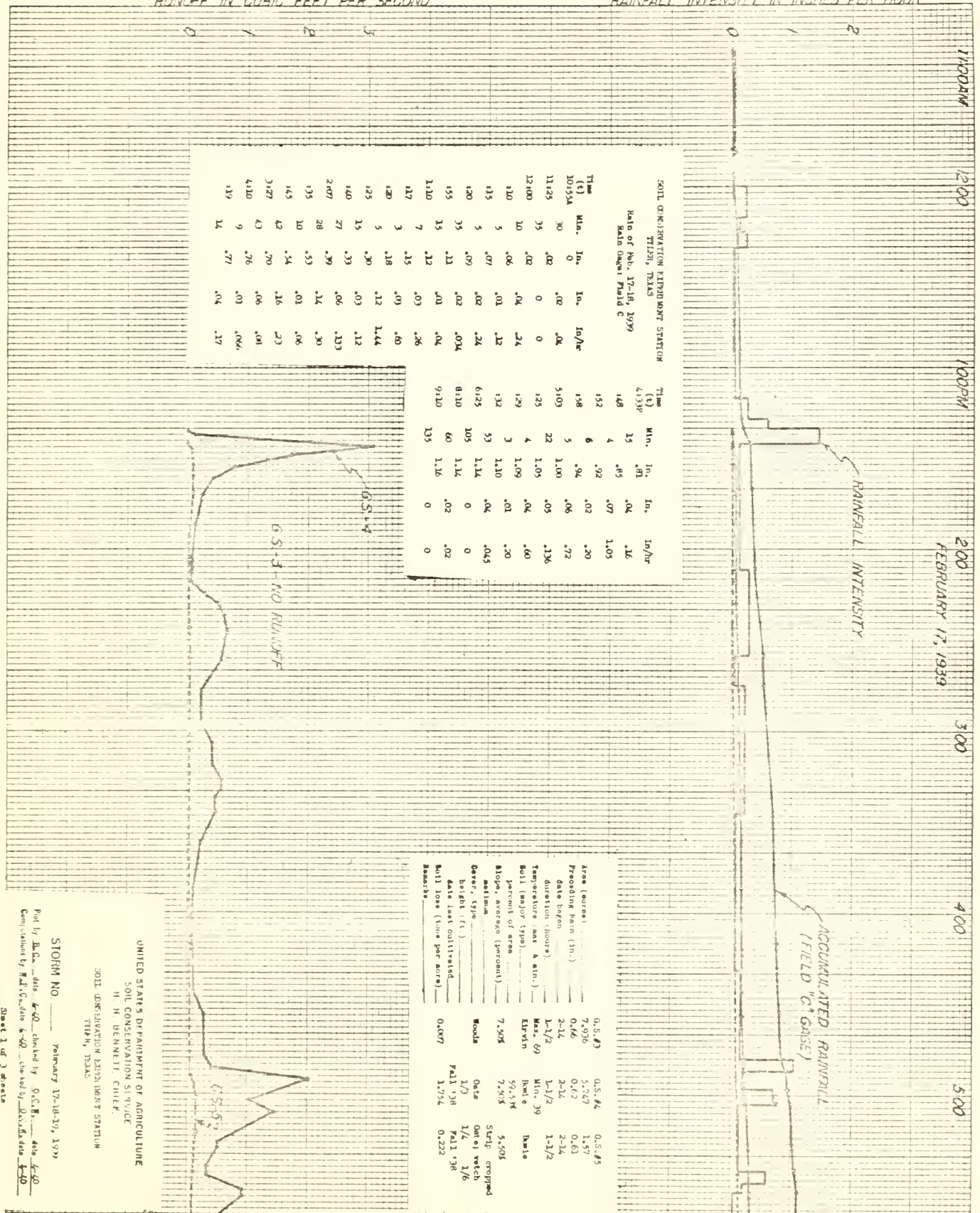
Plot by H. G. date 4-27 checked by G. W. date 4-20  
 Computations by M. L. G. date 4-20 checked by G. W. date 4-20

Sheet 3 of 3 sheets

100

ACCUMULATED RAINFALL & RUNOFF IN INCHES  
RAINFALL INTENSITY IN INCHES PER HOUR

RUNOFF IN CUBIC FEET PER SECOND



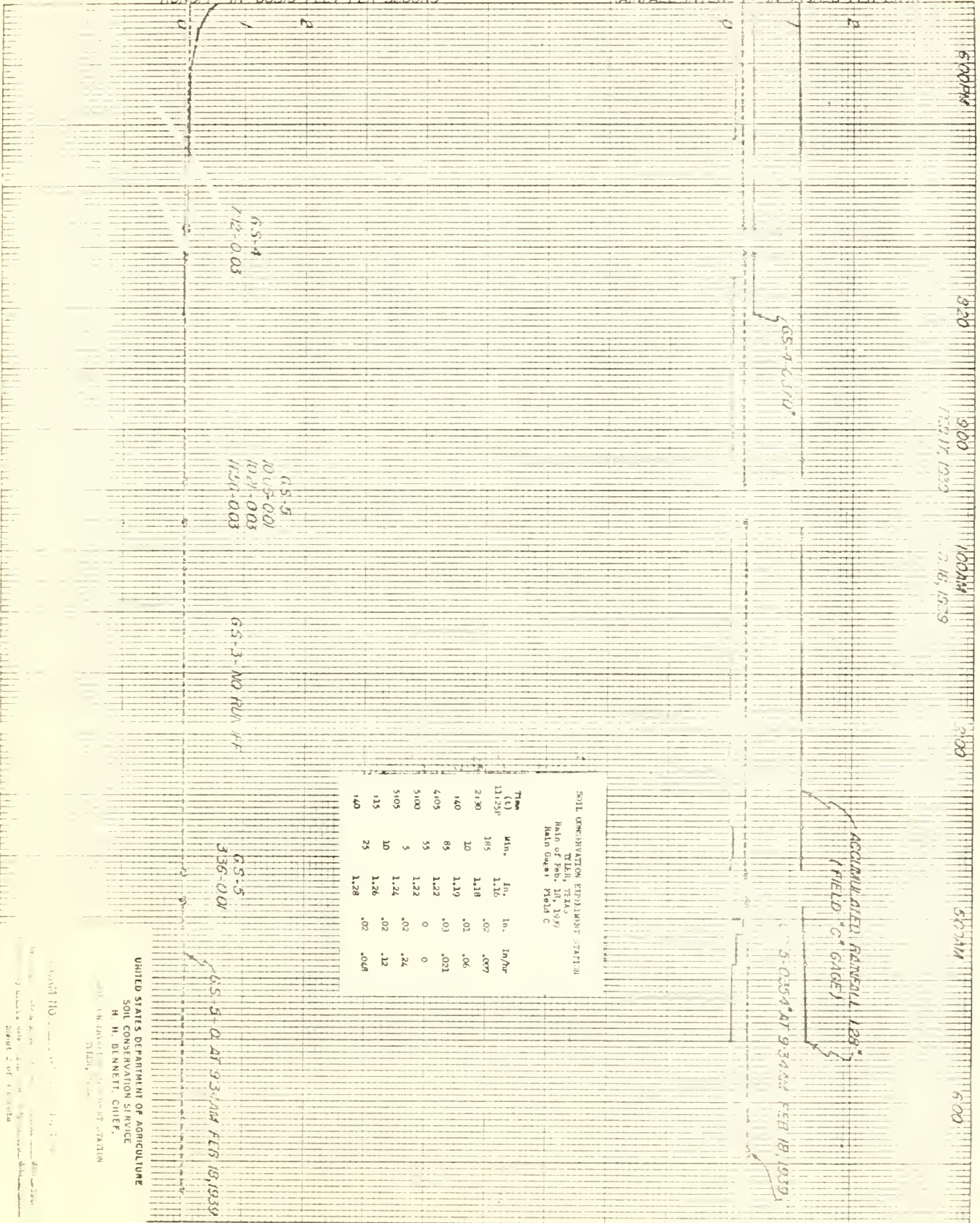






ACCUMULATED RAINFALL & RUNOFF IN INCHES  
 RAINFALL INTENSITY IN INCHES PER HOUR

RUNOFF IN CUBIC FEET PER SECOND



SOIL CONSERVATION SERVICE  
 FIELD STATION  
 Rain of Feb. 18, 1939  
 Rain Gauge Field C

| Time (h) | Min. | In.  | In. | In/hr |
|----------|------|------|-----|-------|
| 11:25    | 185  | 1.16 | .02 | .007  |
| 2:30     | 10   | 1.18 | .01 | .06   |
| 4:05     | 85   | 1.19 | .03 | .021  |
| 5:00     | 55   | 1.22 | 0   | 0     |
| 5:05     | 5    | 1.24 | .02 | .24   |
| 11:5     | 10   | 1.26 | .02 | .12   |
| 1:40     | 25   | 1.28 | .02 | .068  |

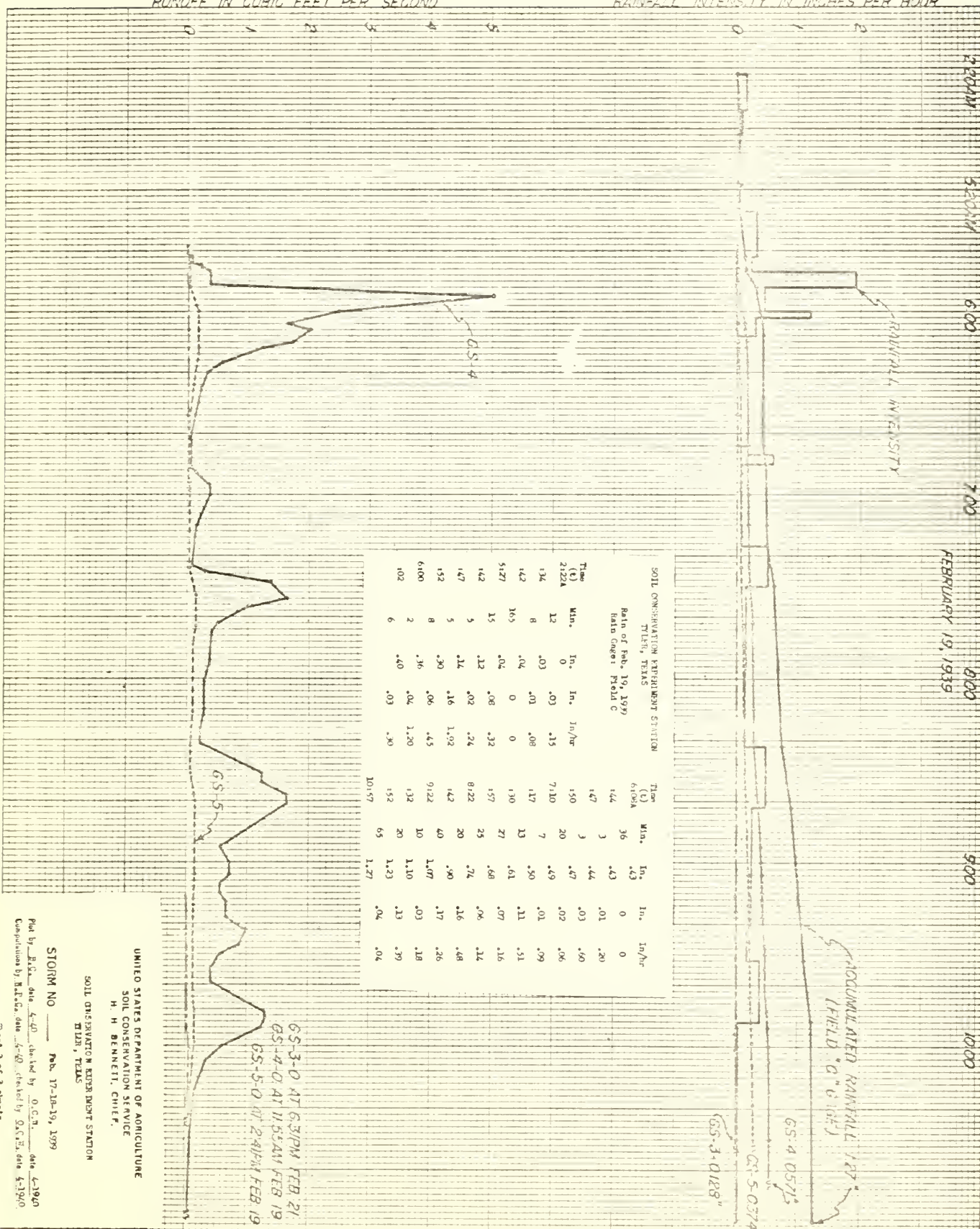
UNITED STATES DEPARTMENT OF AGRICULTURE  
 SOIL CONSERVATION SERVICE  
 H. M. BENNETT, CHIEF

FIELD STATION  
 FEB 18, 1939

1500

ACCUMULATED RAINFALL & RUNOFF IN INCHES  
RAINFALL INTENSITY IN INCHES PER HOUR

RUNOFF IN CUBIC FEET PER SECOND



1000



ACCUMULATED RAINFALL & RUNOFF IN INCHES  
RAINFALL INTENSITY IN INCHES PER HOUR

RUNOFF IN CUBIC FEET PER SECOND

9:20AM

10:20

11:00

12:00/NOON

2:40PM 3:00

5:00PM

6:00

7:00

FEBRUARY 24, 1939

ACCUMULATED RAINFALL  
(FIELD "C" GAGE)

| SOIL CONSERVATION EXPERIMENT STATION |      |     |     |        |             |      |     |     |        |
|--------------------------------------|------|-----|-----|--------|-------------|------|-----|-----|--------|
| TULSA, TEXAS                         |      |     |     |        |             |      |     |     |        |
| Rain of Feb. 24-25, 1939             |      |     |     |        |             |      |     |     |        |
| Rain Gage: Field C                   |      |     |     |        |             |      |     |     |        |
| Time<br>(h)                          | Min. | In. | In. | In./hr | Time<br>(h) | Min. | In. | In. | In./hr |
| 9:25A                                | 2    | 0   | .02 | .60    | 12:12P      | 18   | .18 | .01 | .03    |
| 127                                  | 10   | .02 | .01 | .06    | 2:35        | 105  | .19 | 0   | 0      |
| 137                                  | 5    | .03 | .01 | .12    | 127         | 12   | .20 | .01 | .05    |
| 142                                  | 46   | .04 | 0   | 0      | 147         | 18   | .24 | .04 | .13    |
| 10:28                                | 4    | .05 | .01 | .15    | 3:05        | 5    | .26 | .02 | .24    |
| 132                                  | 18   | .05 | 0   | 0      | 149         | 10   | .27 | .01 | .06    |
| 150                                  | 5    | .08 | .03 | .36    | 157         | 97   | .27 | 0   | 0      |
| 155                                  | 65   | .10 | .02 | .02    | 160         | 5    | .31 | .03 | .36    |
| 12:00                                | 5    | .11 | .01 | .12    | 155         | 10   | .34 | .03 | .18    |
| 10:58                                | 9    | .14 | .03 | .36    | 1705        | 15   | .37 | .03 | .12    |
| 110                                  | 13   | .15 | .01 | .05    | 180         | 30   | .42 | .02 | .04    |
| 123                                  | 9    | .20 | .03 | .20    | 150         | 165  | .46 | .04 | .01    |
|                                      |      |     |     |        | 10:35       | 325  |     |     |        |

|                                |          |          |          |
|--------------------------------|----------|----------|----------|
| Area (acres).....              | 0.843    | 0.844    | 0.845    |
| Preceding rain (in.).....      | 7.936    | 5.267    | 1.577    |
| date before.....               | 1-29     | 1-29     | 1-29     |
| duration (hours).....          | 2-19     | 2-19     | 2-19     |
| Temperature (air & soil).....  | 5-1/2    | 5-1/2    | 5-1/2    |
| Soil (major type).....         | Max. 57  | Min. 38  | Max. 57  |
| percent of area.....           | Eluvio   | Bwto     | Bwto     |
| Slope, average (percent).....  | 7.935    | 7.935    | 7.935    |
| Cover, type.....               | None     | None     | None     |
| height (ft.).....              | 1/3      | 1/3      | 1/6      |
| date last cultivated.....      | Feb 1938 | Feb 1938 | Feb 1938 |
| Soil type (time per acre)..... | 0.002    | 1.654    | 0.671    |
| Remarks.....                   |          |          |          |

UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

M. H. BENNETT, CHIEF

TULSA, TEXAS

STATION NO. February 24 & 25, 1939

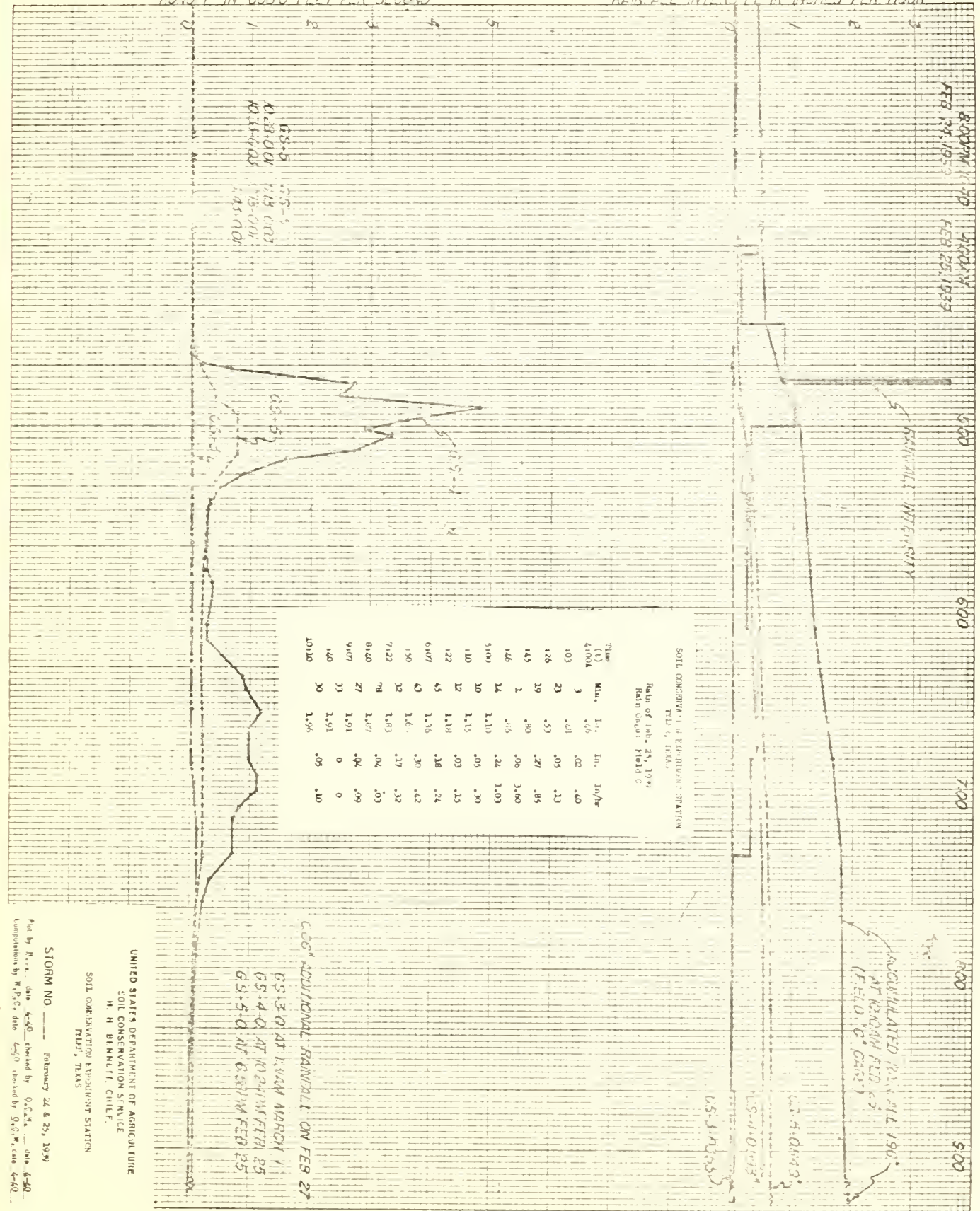
by W. L. ... date 4-21-41 ... checked by W. L. ... date 4-21-41  
by W. L. ... date 4-21-41 ... checked by W. L. ... date 4-21-41





ACCUMULATED RAINFALL & RUNOFF IN INCHES  
RAINFALL INTENSITY IN INCHES PER HOUR

RUNOFF IN CUBIC FEET PER SECOND



SOIL CONSERVATION SERVICE STATION  
TULSA, OKLA.

Basin of Int. 24, 1934  
Rain Gauge 1934 C

| Time (h) | Min. | In.  | In/hr |
|----------|------|------|-------|
| 4:00 A   | 3    | .66  | .02   |
| 103      | 21   | .51  | .05   |
| 126      | 19   | .53  | .27   |
| 145      | 1    | .80  | .85   |
| 165      | 14   | .06  | 3.60  |
| 180      | 10   | .24  | 1.03  |
| 200      | 10   | .05  | .30   |
| 222      | 12   | .03  | .15   |
| 242      | 45   | .38  | .24   |
| 2607     | 43   | .30  | .42   |
| 290      | 32   | .17  | .32   |
| 3122     | 78   | .06  | .03   |
| 3160     | 27   | .04  | .09   |
| 3107     | 31   | 0    | 0     |
| 160      | 30   | .05  | .10   |
| 10:10    | 30   | 1.96 |       |

6.5-5-0 AT 11:44 AM MARCH 1  
6.5-5-0 AT 10:24 PM FEB. 25  
6.5-5-0 AT 6:24 PM FEB. 25

ACCUMULATED RAINFALL 1934  
AT KNOX FEB. 25  
(FIELD "C" GAUGE)

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
H. H. BRINLEY, CHIEF

SOIL CONSERVATION SERVICE STATION  
TULSA, OKLA.

STORM NO. 24, 1934

Plot by R. C. Case 4-40 checked by O. C. Case 4-40  
Computation by R. C. Case 4-40 checked by O. C. Case 4-40

100-103



ACCUMULATED RAINFALL & RUNOFF IN INCHES  
 RAINFALL INTENSITY IN INCHES PER HOUR

RUNOFF IN CUBIC FEET PER SECOND

0 1 2 3 4 5 6 7 8 9 10

200 AM

300

400

MAY 20, 1939

500

600

700

RAINFALL INTENSITY

ACCUMULATED RAINFALL 0.76"  
 (FIELD "C" GAGE)

G.S.-4-0286

G.S.-5-0267

G.S.-4

G.S.-4

G.S.-4

G.S.-3+NO RUNOFF

G.S.-5

SOIL DISSEMINATION EXPERIMENT STATION  
 TULSA, TEXAS

Run of May 20, 1939  
 Main (upper) Field C

| Time (h) | Min. | In. | In. | In/hr |
|----------|------|-----|-----|-------|
| 1:45 A   | 2    | 0   | .05 | 1.50  |
| 1:47     | 5    | .05 | .21 | 3.24  |
| 1:52     | 10   | .32 | .33 | 1.98  |
| 2:02     | 5    | .65 | .07 | .94   |
| 2:07     | 5    | .72 | .02 | .24   |
| 2:12     | 5    | .74 | .02 | .08   |
| 2:27     | 15   | .76 |     |       |

|                           |         |         |               |
|---------------------------|---------|---------|---------------|
| Area (acres)              | 0.843   | 0.544   | 0.545         |
| Preceding rain (in.)      | 7.936   | 6.05    | 2.64          |
| date basin                | May 18  | May 18  | May 18        |
| duration (hours)          | 1 1/2   | 1 1/2   | 1 1/2         |
| temperature (air & soil)  | Max. 87 | Min. 65 |               |
| Soil (major type)         | Kirwin  | Bowin   | Bowin         |
| percent of area           | 7.50%   | 7.50%   | 5.50%         |
| Soil (minor type)         |         |         |               |
| Soil (type)               | Moile   | Cam     | Strip cropped |
| date last cultivated      |         | May 5-6 | May 15        |
| soil loss (tons per acre) |         | 5.435   | 0.609         |
| Remarks                   |         |         |               |

UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

H. H. BENNETT, CHIEF

SOIL CONSERVATION EXPERIMENT STATION

TULSA, TEXAS

STORM NO.

May 20, 1939

Run of May 20, 1939 (Main) (upper) Field C

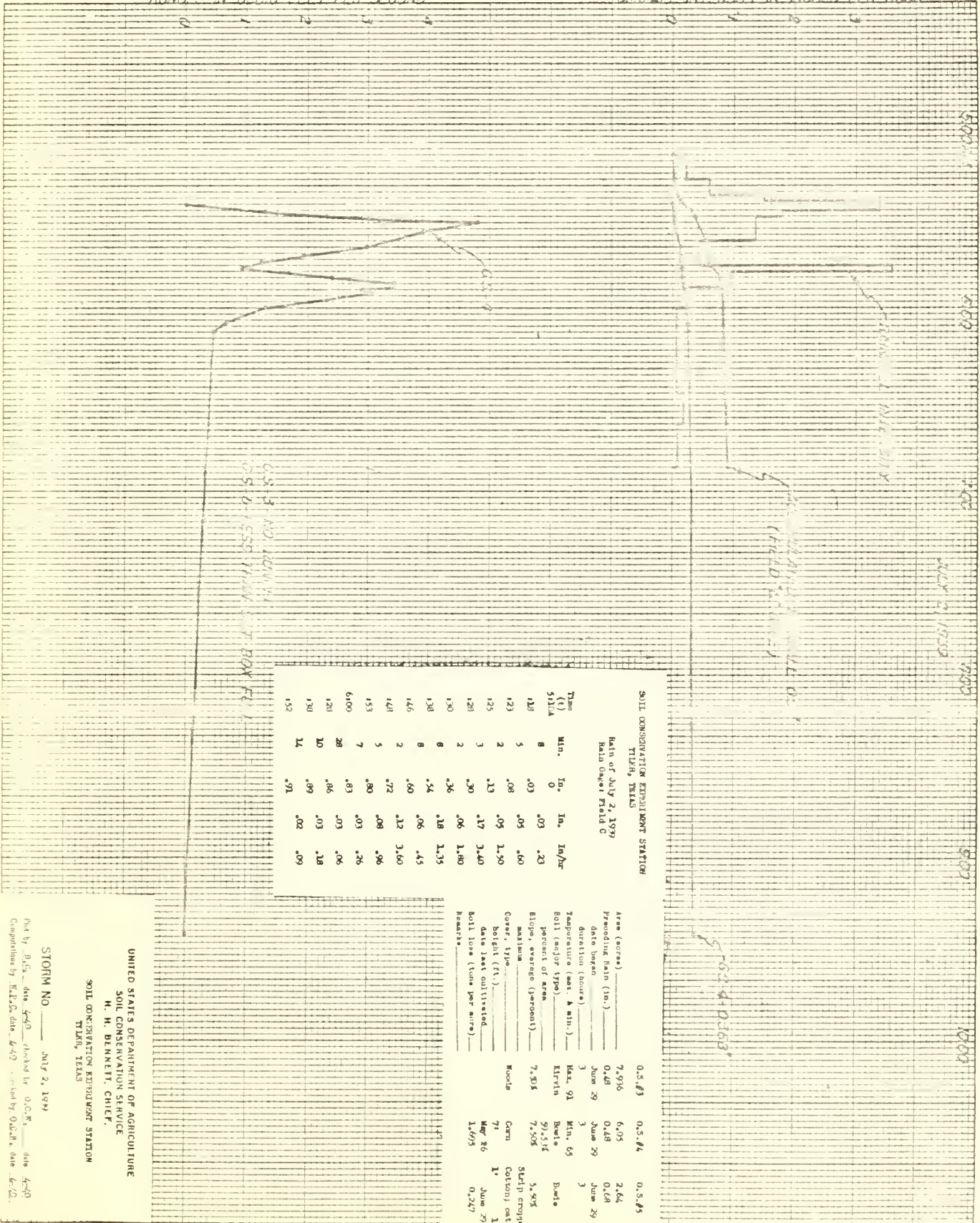
Sheet 1 of 1 Sheet

1337



ACCUMULATED RAINFALL & RUNOFF IN INCHES  
 RAINFALL INTENSITY IN INCHES PER HOUR

RUNOFF IN CUBIC FEET PER SECOND



0.5-3 IN. 100% 1/4  
 0.5-6-1-550 11:00 AM - 7:00 PM

0.5-3 IN. 100% 1/4  
 0.5-6-1-550 11:00 AM - 7:00 PM

SOIL CONSERVATION EXPERIMENT STATION

TIFFIN, TEXAS

Run of July 2, 1979  
 Rain Gauge Field C

| Time<br>(1) | Min. | In. | In. | In/hr |
|-------------|------|-----|-----|-------|
| 5:10 A      | 8    | 0   | .03 | .23   |
| 5:15        | 5    | .08 | .05 | .60   |
| 5:20        | 2    | .13 | .09 | 1.50  |
| 5:25        | 3    | .30 | .17 | 3.40  |
| 5:30        | 2    | .36 | .06 | 1.80  |
| 5:35        | 8    | .54 | .18 | 1.35  |
| 5:40        | 8    | .60 | .06 | .45   |
| 5:45        | 2    | .72 | .12 | 3.60  |
| 5:50        | 5    | .80 | .08 | .96   |
| 5:55        | 7    | .83 | .03 | .26   |
| 6:00        | 28   | .86 | .03 | .06   |
| 6:05        | 10   | .89 | .03 | .18   |
| 6:10        | 14   | .91 | .02 | .09   |

|                           |         |         |                |
|---------------------------|---------|---------|----------------|
| Area (acres)              | 0.5, #3 | 0.5, #4 | 0.5, #5        |
| Preceding Rain (in.)      | 7.936   | 6.05    | 2.64           |
| date began                | June 29 | June 29 | June 29        |
| duration (hours)          | 3       | 3       | 3              |
| Temperature (max. & min.) | Max. 91 | Min. 65 |                |
| Soil (major type)         | Elfrin  | Bwle    | Bwle           |
| percent of area           | 7.55    | 7.55    | 3.95           |
| Soil type                 | Moctac  | Corn    | Stirp-cropland |
| Soil depth (ft.)          | 71      | 71      | 1'             |
| date last cultivated      | May 86  | May 86  | June 29        |
| Soil loss (tons per acre) | 1.695   | 1.695   | 0.247          |
| Remarks                   |         |         |                |

UNITED STATES DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

M. H. BENNETT, CHIEF

SOIL CONSERVATION EXPERIMENT STATION

TIFFIN, TEXAS

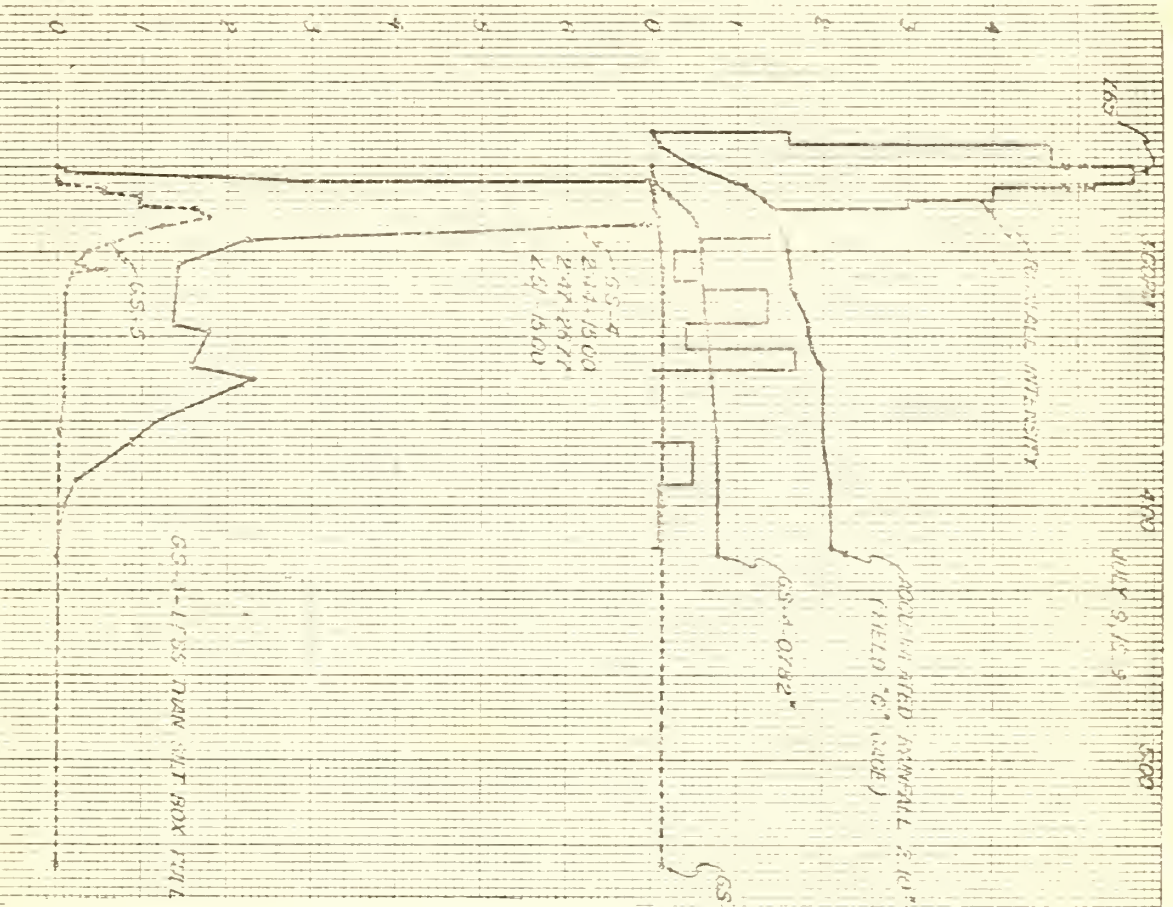
STORM NO. — July 2, 1979

Plot by H.S. — data 5-40 — checked by O.C.R. — date 4-40  
 Computed by M.L.G. — date 4-49 — checked by O.C.R. — date 4-42

17357

ACCUMULATED RAINFALL & RUNOFF IN INCHES  
RAINFALL INTENSITY IN INCHES PER HOUR

RUNOFF IN CUBIC FEET PER SECOND



SOIL CONSERVATION EQUIPMENT STATION  
FIELD, TEXAS

| Time (h) | Run of July 9, 1939 | Run of July 9, 1939 | Run of July 9, 1939 | Run of July 9, 1939 |
|----------|---------------------|---------------------|---------------------|---------------------|
| (1)      | Min.                | In.                 | In.                 | In./hr              |
| 2:02     | 3                   | 0                   | .08                 | 1.60                |
| 3:05     | 3                   | .08                 | .79                 | 4.68                |
| 4:00     | 4                   | .47                 | .51                 | 7.66                |
| 4:45     | 1                   | .98                 | .12                 | 7.20                |
| 4:55     | 3                   | 1.10                | .20                 | 4.00                |
| 4:58     | 2                   | 1.30                | .10                 | 3.00                |
| 5:00     | 7                   | 1.60                | .16                 | 1.37                |
| 5:07     | 3                   | 1.56                | .09                 | .60                 |
| 5:09     | 7                   | 1.59                | .03                 | .26                 |
| 5:10     | 2                   | 1.62                | .02                 | .60                 |
| 5:17     | 8                   | 1.82                | .04                 | 1.35                |
| 5:23     | 6                   | 1.86                | .04                 | .40                 |
| 5:28     | 5                   | 2.00                | .14                 | 1.68                |
| 5:35     | 10                  | 2.00                | 0                   | 0                   |
| 5:40     | 15                  | 2.08                | .02                 | .08                 |

|                           |         |         |         |
|---------------------------|---------|---------|---------|
| Area (acres)              | 7.96    | 0.5, #3 | 0.5, #5 |
| Preming Rain (in.)        | 0.96    | 6.03    | 2.46    |
| date begin                | July 2  | 0.01    | 1.04    |
| duration (hours)          | 1-1/2   | July 2  | July 2  |
| temperature (max. & min.) | Max. 98 | 1-1/2   | 1-1/2   |
| soil (major type)         | Kerrin  | Min. 72 | Min. 72 |
| percent of area           | 7.96    | 7.96    | 7.96    |
| Slope, average (percent)  | 7.96    | 7.96    | 7.96    |
| soil type                 | 7.96    | 7.96    | 7.96    |
| depth (ft.)               | 7.96    | 7.96    | 7.96    |
| date last cultivated      | 7.96    | 7.96    | 7.96    |
| soil loss (tons per acre) | 0.90    | 4.376   | 0.787   |
| Remarks                   |         |         |         |

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
N. H. BENNETT, CHIEF  
SOIL CONSERVATION EQUIPMENT STATION  
FIELD, TEXAS

STORM NO. 10 July 9, 1939  
Plot by P. J. A. 6-40 checked by C. S. M. date 6-40  
Corrections by A. P. A. 6-40 checked by C. S. M. date 6-40  
Sheet 1 of 1 Sheet



